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Development of the Blueprint of the Battlefield

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The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), under the sponsorship of the Director, Force Development, Headquarters, Department of the Army (HQDA), and the Assistant Deputy Chief of Staff for Concepts and Doctrine, HQ, Training and Doctrine Command, developed blueprints for the tactical, operational, and strategic levels of war. The Blueprint collectively includes three separate blueprints, one for each level of war. The Blueprint is a common reference system for field commanders, combat developers, analysts, trainers, and planners who analyze and integrate operations. As such, the Blueprint helps staff and field organizations relate Army needs to Army missions and provides a basis for describing Army requirements, capabilities, and combat activities at the three levels of war. This report discusses the background for completing the final Blueprint, as well as methods used for researching and developing the Blueprint, the three levels of war, and each of the three blueprints. It discusses applications of the Blueprint and limitations and linkages among the blueprints. It also includes a summary of issues that require decisions by Army sponsors. Finally, the report provides the end product of the project as appendixes (i.e., Blueprints of the three levels of war).

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DEVELOPMENT OF THE BLUEPRINT OF THE BATTLEFIELD

EXECUTIVE SUMMARY

Requirement:

The purpose of this project was to develop a hierarchy of the functions that the Army performs on or in support of the battlefield for three levels of war. The Blueprint includes a list of functions and their definitions, a discussion of the levels of war and each of three blueprints, blueprint applications, and links among the three blueprints.

Procedure:

A heuristic process was employed for developing each blueprint. After the initial research, a strawman blueprint was developed and presented to appropriate subject matter experts (SMEs). Iteratively, each strawman blueprint was revised and then presented to the next institution's SMEs and a draft with definitions was developed. Once all SMEs had been consulted, the draft blueprint was submitted to a general officer for review before going outside the Army and then to allies. SMEs varied with the level of war. When all three blueprints were completed, they were integrated to produce a cohesive document.

Findings:

The Blueprint represents the functions that the Army performs at all three levels of war.

All unified, joint, and combined forces perform the functions in the blueprints for the operational and strategic levels of war.

Blueprint functions can be defined.

The Blueprint has utility in a wide variety of applications.

There are three types of vertical links among the three blueprints that can be described--integration of ends, ways, and means; linkage of operating systems between blueprints; and linkage of individual functions/subfunctions between blueprints.

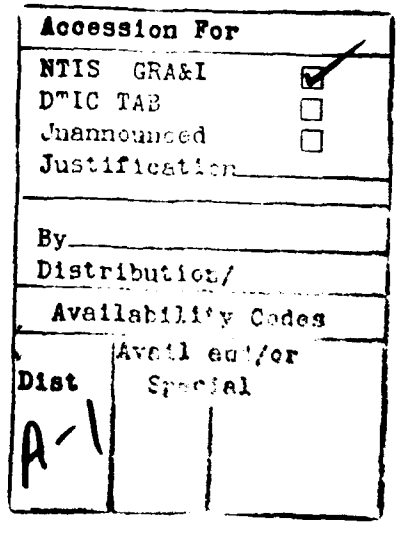
The Blueprint does not define horizontal linkage of functions, which is more the product of military doctrine and training and the dynamics of command and control.

Utilization of Findings:

There are several potential application of the Blueprint, namely

- Studies and analyses
- Scenario development
- Materiel systems requirements
- Doctrine development
- Training and education
- Test and evaluation
- Unit applications
- OPLAN/CONPLAN development
- Strategy development

Researchers also found that the Blueprint cannot be used to guide the conduct of training, replace the concept of operations in plans and orders, or to provide a dynamic model of warfare.



DEVELOPMENT OF THE BLUEPRINT OF THE BATTLEFIELD

CONTENTS

CONTENTS (Continued)

CONTENTS (Continued)

CONTENTS (Continued)

CONTENTS (Continued)

CONTENTS (Continued)

DEVELOPMENT OF THE BLUEPRINT OF THE BATTLEFIELD

Introduction

Purpose of the Report

This report describes the Blueprint of the Battlefield for the three levels of war and its development. It discusses the criteria used for selecting the functions that make up the Blueprint. It describes the history and development of the Blueprint. The report describes the rationale for the final form of the Blueprint by delineating the major issues that surfaced during development of each Blueprint. Lastly, it provides the results of the research and development of an integrated, three-level-of-war hierarchy of functions and their definitions.

Problem to be Solved

The problem addressed in this project is the development of a comprehensive, hierarchically organized listing, with definitions, of the functions performed at the strategic, operational, and tactical levels of war. Initially, Blueprint development included only the tactical level of war. The resulting descriptive model is called the Blueprint of the Battlefield. Because of the nature and conduct of warfare by the United States, the scope of Blueprint development was expanded to include functions relating to other Services, allied (combined), and unified forces particularly for the operational and strategic levels of war.

As discussed below in greater detail, the tactical level Blueprint primarily addresses functions performed on the battlefield. However, as the Blueprint was expanded to include the operational and strategic levels of war, the functions performed became increasingly removed from the battlefield. First, the functions associated with conducting campaigns and major operations in a theater, or area, of operations were added. Then functions associated with successfully executing national military and theater strategy and related strategic plans were added; these functions are performed by unified, joint, or combined forces at the national level and in theaters. However, the scope of the Blueprint of the Battlefield was limited to the military component of the strategic level of war. So, although the title, Blueprint of the Battlefield, suggests otherwise, the Blueprint of the Battlefield includes functions short of war. It covers the entire "operational continuum," i.e., peacetime competition, conflict, and war (limited, general).

The Blueprint's characteristics of completeness, careful definition, and neutrality with regard to means of function implementation were considered invaluable to the Army in working with joint and combined services. Headquarters, Department of the Army (HQDA), subsequently determined that it was essential, therefore, to develop a version of the Blueprint that encompasses the functions of all the services and that is expressed in a common language acceptable to all the services and The Joint

Staff. However, the scope of this report is further limited to the U.S. Army's Blueprint development and not the development of a Joint Blueprint.

This technical report, in addition to describing the final product of this research and development effort, describes how the Blueprint was developed. It also discusses the issues that surfaced during its development.

References

Required and related publications, and a partial listing of references used in developing the Blueprint, are listed in the bibliography of the report.

Explanation of Abbreviations and Terms

Abbreviations and terms used in this report are explained in the Glossary in Appendix D.

Background

In February 1987, the Commander, TRADOC, began the "Architecture for the Future Army" (AFA) initiative. AFA is a multifaceted initiative that includes a requirement for developing a hierarchy of functions that the Army performs on the battlefield at the tactical level of war. This functional structure is called the "Blueprint of the Battlefield." The Tactical Blueprint is organized around Battlefield Operating Systems (BOS). Commander, TRADOC, approved the BOS on 3 June 1987. The BOS are discussed later in the report.

Based on work that had been completed by the U.S. Army Research Institute (ARI) with the support of Dynamics Research Corporation (DRC) to develop an Army Functional Hierarchy, HQ TRADOC asked ARI for help in developing the Blueprint of the Battlefield at the tactical level of war. The tactical level of war Blueprint was developed, formally staffed, and published on 8 July 1988 as TRADOC Pamphlet 11-9.

In December 1987, the Director, Force Development, Office of the Deputy Chief of Staff for Operations and Plans (DAMO-FD), HQ Department of the Army (HQDA) tasked HQ TRADOC (DCSDOC) to extend the Blueprint to the operational and strategic levels of war. DCSDOC, HQ TRADOC, in turn requested additional research and development support from ARI.

At the time, the U.S. Army's doctrine development for the levels of war, particularly the operational and strategic levels, had been evolving. The Army's capstone doctrinal manual, FM 100-5, Operations (1986) provides a limited discussion of the operational level of war and barely touches the strategic level of war. Other recent joint doctrinal publications and some Army field manuals gave a relatively limited treatment of these two

levels of war. This is in contrast to the extensive list of reference materials available for developing the tactical level of war Blueprint.

There had been an active debate regarding the nature of the operational and strategic levels of war, especially for the operational level. As a result of the debate, extensive writings on the operational and strategic levels of war had been appearing in various military publications, including service staff and war college monographs and research papers. Also, many of those individuals involved in the debate were instructors in the service schools and colleges and made themselves and their instructional materials available to this project. Research included examination of material from other services and NATO Allies on the subject. Of necessity, however, much of the work covered in this report breaks new ground.

In September 1986, Congress passed the DoD Reorganization Act which made the Chairman, Joint Chiefs of Staff (CJCS) responsible for developing joint doctrine. The CJCS approved the Joint Doctrine Master Plan. The Joint Staff and the Services are developing this Joint doctrine, but it is mostly incomplete. Some key draft and test Joint Pubs have been distributed, and every effort has been made to ensure the Blueprint is compatible with that evolving Joint doctrine.

At an In-Process Review (IPR) on 21 July 1988, the Director, Force Development (DAMO-FD), HQDA approved continuing the development of the Operational Level of War Blueprint. He gave guidance on operational level operating systems, and he also retained use of the term Battlefield Operating Systems (BOS) for the tactical level. Subsequently, the decision was made not to coin acronyms for operational and strategic level operating systems. Table 1 provides the definitions for operating systems at each level of war. The text includes a more thorough discussion of operating systems.

At the final IPR on the Operational Blueprint on 10 January 1989, the Director, Force Development approved the Operational Blueprint for staffing. He made a number of decisions regarding the structure of the Operational Blueprint that are discussed in the section on issues.

The Director's office (ADCSOPS-FD, HQDA) subsequently staffed the final draft Operational Blueprint report (dated December 1, 1989) with the Army Staff. Comments, where appropriate, were incorporated into the text. Subsequently, the Operational Level Blueprint was integrated into TRADOC Pam 11-9 with a discussion of the three levels of war (strategic, operational, and tactical) and a chapter and appendix for the Strategic Blueprint to be developed later. The revised TRADOC Pam 11-9 (dated 27 April 1990) was subsequently published by HQ TRADOC in July 1990. It is noted that, although the lead for developing the Blueprint switched periodically between HQDA and

Table 1

Operating Systems Terminology for Levels of War

Major functions at the top of each blueprint's hierarchy are called operating systems, as follows:

Level of war	Definition
Strategic	**The major functions occurring at the national military and theater strategic levels performed by civil and military organizations and unified, joint and combined strategic forces for successfully executing strategic plans/theater campaigns**
Operational	**The major functions occurring in the theater (or area) of operations, performed by joint and combined operational forces, for successfully executing subordinate campaigns and major operations to accomplish the strategic objectives of the unified commander or higher military authority and operational objectives**
Tactical	**The major functions occurring on the battlefield, performed by the force to successfully execute operations (battles and engagements) by the Army to accomplish military objectives directed by the operational commander. These are called Battlefield Operating Systems (BOS).**

HQTRADOC, each headquarters was kept informed on decisions and the status of the project. In each case, decisions made in one headquarters were concurred in by the other headquarters.

At the 10 January 1989 IPR, the Director, Force Development approved continuation of the work to develop a similar Blueprint for the Strategic Level of War. The Strategic Blueprint was to include a unified commander's theater strategic functions and national military strategic functions. Finally, he indicated that the Blueprints for all three levels of war should be integrated into TRADOC Pam 11-9 and potentially a single HQDA publication.

As with the tactical functions the Operational and Strategic Blueprints are organized as hierarchies. Blueprint functions, by definition, must be generic and not tied to specific doctrine or means of execution. The only requirement is that the structure be sufficiently robust to accommodate doctrinal alternatives for analysis. This permits HQDA to conduct its analysis in the context of existing doctrine and not be required to change the functional structure every time doctrine and systems change. The next section of this report describes the logic and structure of the Blueprint.

At a 22 January 1990 briefing, the Commander TRADOC approved republication of TRADOC Pam 11-9 (tactical and operational levels), and the completion of the Strategic Blueprint and its incorporation into an integrated three level of war pamphlet. He deferred a decision on making the Blueprint a DA publication.

HQ TRADOC staffed the Strategic Blueprint worldwide between March and June 1990. In the meantime, the 27 April 1990 version (tactical and operational levels) was published and distributed in July 1990. After receipt of comments on the staffing, the Strategic Blueprint was completed in January 1991 and integrated into a three level of war Blueprint in February 1991.

As the development of the three level Blueprint was being completed, Commander TRADOC decided that there should be an assessment of the Blueprint to ensure that "low intensity conflict (LIC)" was represented. Work on integrating LIC and special operations activities into the Blueprint is ongoing as this report is being completed.

Extensive coordination and participation was sought for each level of war Blueprint. Table 2 summarizes the primary commands and agencies consulted in Blueprint development.

On 6 June 1991 the Commander TRADOC, in a final briefing on the Blueprint, approved the integrated three level of war Blueprint. He also approved publication of the Blueprint as a DA pamphlet. The Vice Chief of Staff of the Army concurred with publication of the Blueprint as a HQDA pamphlet in a briefing on 2 July 1991.

Table 2

Coordination Conducted During Development of the Blueprint of the Battlefield

Coordination conducted w/various commands, staffs, agencies, schools, and integrating centers / Level of War Blueprint			Strategic	Operational	Tactical
Allies:	Britain			X	X
	France			X	X
	Germany			X	X
Combined/unified/specified commands and components:					
	EUCOM; USAREUR; SHAPE; AFCENT		X	X	
	FORSCOM		X		
	LANTCOM		X		
	PACOM;WESTCOM		X	X	
	CENTCOM; 3[d]ARMY		X		
	USSOCOM		X		
DIA			X		
OJCS:	J2, J3, J4, J5, J6, J7, J8		X		
Other services:	HQUSN; HQUSAF		X		
Other Army HQ:					
	AMC		X		
	HQTRADOC		X	X	X
	INTSCOM		X		
	CMH		X		
	USAMH INST.		X	X	X
HQDA:	ODCSOPS:	SS	X	X	
		FD	X	X	
		OD	X	X	
	ODCSLOG		X	X	
	ODCSINT		X	X	
	ODCSPER		X		
Reserve component			X	X	
Senior service colleges:					
	USAWC		X	X	
	Air War College		X	X	
	National Defense U.		X	X	
	Naval War College		X	X	
Combined arms command:					
	C & GSC:	SAMS	X	X	
		SASO	X	X	
		JT/CMBD OPNS DIR.	X	X	
		JT DOC OFC	X	X	
		LIC PROP. OFC	X	X	
	CACDA:	BAID	X	X	X
		C3ID	X	X	X
	TRAC				X
Combined Arms Support Command					
	HQ		X	X	X
	Various Schools				X
Other TRADOC Schools:					
	AD				X
	AR				X
	ARTY				X
	AVN				X
	CHEM/MP				X
	EN				X
	INF				X
	INTELL				X
	SIGNAL				X
	JFK Spec. War. Ctr				X

Organization of the Report

The section of this report on methodology describes the structure of the Blueprint of the Battlefield and how the Blueprint was developed. The next section discusses potential applications of the Blueprint. This is followed by a discussion of the levels of war. The section on levels of war contains a discussion of the strategic, operational and tactical levels of war. Three sections provide narrative discussions and graphical depictions of the three Blueprints, Strategic, Operational and Tactical, respectively. The next section discusses the vertical linkage of Blueprints. The last section summarizes issues raised during the development of the Blueprint.

The definitions of the functions and subfunctions for each Blueprint by operating system are contained in Appendix A, B and C (Strategic, Operational, and Tactical, respectively). A Glossary is also provided in Appendix D. The bibliography contains a partial list of references used in preparing the Blueprint of the Battlefield.

Methodology, Structure, and Development of Blueprint of the Battlefield

Purpose

This section describes the methodology used for developing the Blueprint of the Battlefield in general and the specific methodologies used for developing each of the three Blueprints (tactical, operational and strategic) in particular. This section also describes the structure of the Blueprint and the criteria used in selecting functions and definitions for the Blueprint. The methodology used for developing the tactical Blueprint is discussed first. The reason for this is to follow the actual chronology used in developing the Blueprint of the Battlefield. The chronology had a significant effect on the way the Blueprint was developed.

Methodology for Developing the Blueprint of the Battlefield

The methodology used for developing each of the three Blueprints is essentially the same but with variations. Figure 1 shows the general methodology used for developing the Blueprint of the Battlefield.

Research characterized the beginning of developing each Blueprint, but this research continued throughout the project. As functions for the operating systems were identified and analyzed, research continued on their origin, definitions and relationship to other functions. Continuous research was even more important during development of the strategic and operational levels. Except for instructional material in a few

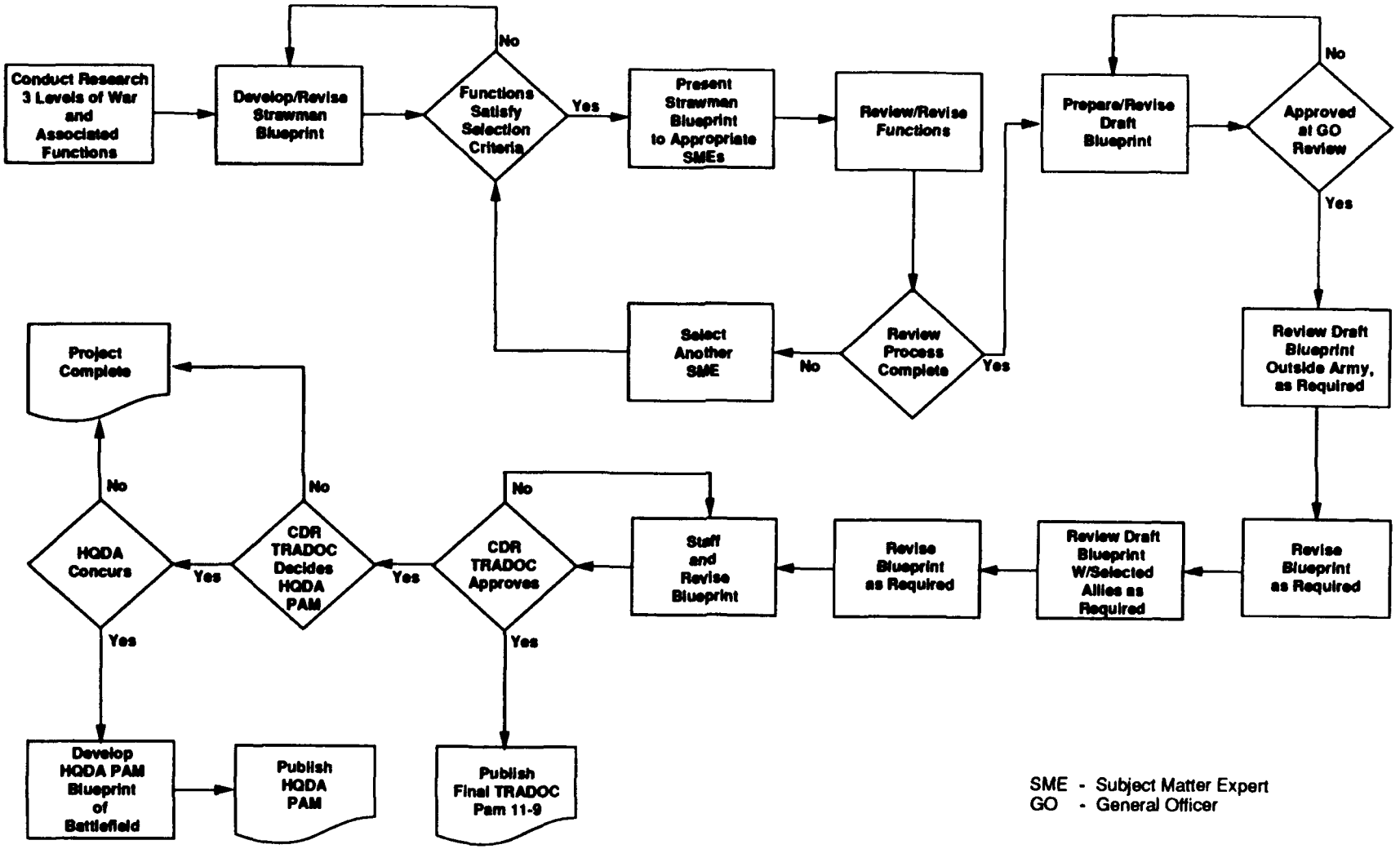


Figure 1. Methodology for development of three level of war Blueprint of the Battlefield.

locations (e.g., School of Advanced Military Studies, Ft. Leavenworth and the US Army War College), Joint Staff or U S Army doctrinal literature on the operational and strategic levels of war was nonexistent at the time.

The first substantive task for each Blueprint was to develop a strawman which fit the criteria established for the Blueprint hierarchy. The strawman was subsequently presented to appropriate subject matter experts (SME). The SMEs varied with the level of war being addressed. For example, TRADOC schools and centers played a primary role for development of the Tactical Blueprint but a less significant role for the operational and strategic levels. After reviewing the strawman with one group of SMEs, the strawman was revised and subsequently presented to another group or groups of SMEs. In this hueristic manner the Blueprint evolved with each successive iteration.

When all SME programed for a particular Blueprint had reviewed the strawman, a draft blueprint was developed and definitions completed. The draft then was presented for a general officer review (GOIPR). The GOIPR consisted of general officers with authority over the Blueprint in question. The GOIPR was conducted either by a group of general officers or general officer sponsors, sequentially. The GO review was conducted prior to reviewing the Blueprints outside the Army, but as with the SME reviews the Blueprint was revised prior to consultations outside the Army. Each Blueprint was reviewed in one way or another by selected allies. The Blueprint was then staffed by HQ TRADOC and integrated into TRADOC Pamphlet 11-9, Blueprint of the Battlefield.

Upon completion of the integrated three level of war Blueprint, the Commander, TRADOC decided that the Blueprint should be further developed into a HQDA pamphlet. With completion of reformatting, the project will be complete and the Blueprint of the Battlefield published as a DA Pam (DA Pamphlet 11-XX).

Criteria for Selecting Components of the Blueprint

Table 3 shows the criteria used for selecting operating systems, functions, generic tasks, and their definitions. The definitions for each level of war and for each operating system determines the assignment of a function to a specific blueprint

Methodology for Developing Each Blueprint

Methodology for development of tactical Blueprint. Figure 2 shows the specific methodology for developing the Tactical Level Blueprint. The approach to develop and refine the Tactical Level of War Blueprint is similar to that described above. In the case of the Tactical Blueprint, SMEs are mission area analysts and doctrinal experts in TRADOC's schools and centers. The TRADOC/DRC team, acting as expediters, solicited ideas and

Table 3

Criteria for Selecting Blueprint Elements*

• Is the functional hierarchy comprehensive?
• Are the functions mutually exclusive?
• Do the subordinate functions fit the definitions of their related operating system?
• Are the functions independent of, but not inconsistent with, existing regulations, doctrine and approved concepts?
• Is the hierarchy consistent with sponsor's and COR's Guidance?
• Is the hierarchy acceptable to SMEs?
• If a function is not included in doctrine, is there a precedent in military history or generally accepted military theory?
• Is a function suggested in SME writings in official periodicals on military thought?

* Operating Systems, Functions, and Definitions

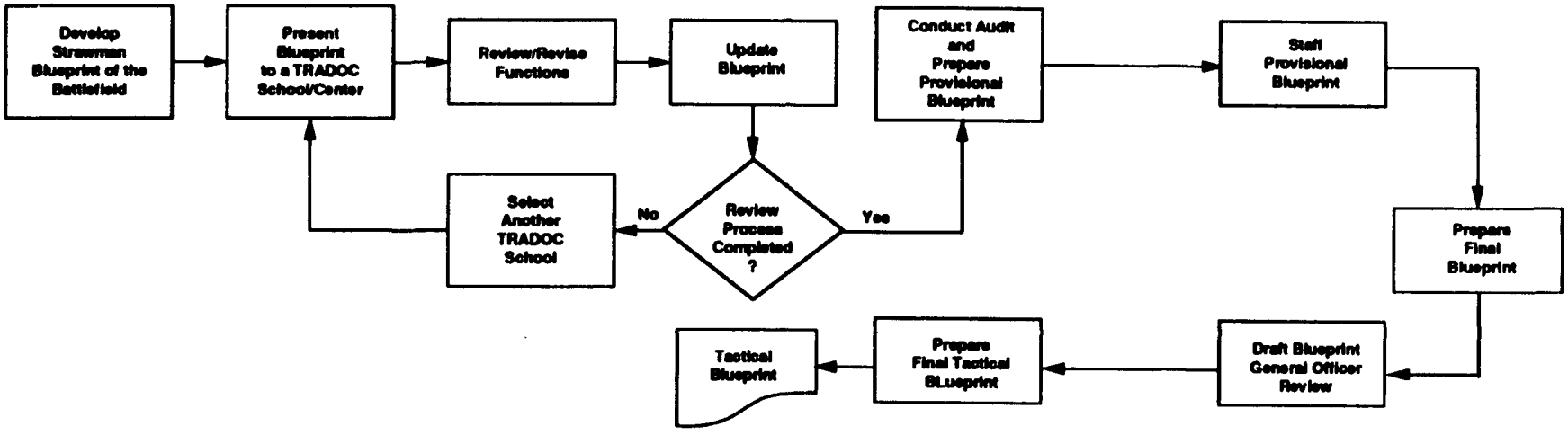


Figure 2. Methodology for development of Blueprint for Tactical Level of War.

suggestions for specific changes to its structure and elements. The team accomplished this in two stages. Initially, it presented a strawman Blueprint at workshops conducted with analysts at each of the mission area proponent sites. The product of each workshop was a revised version of the Blueprint that participants at the following workshop revised, in turn. Subsequently, analysts at each site reviewed the final provisional Blueprint, developed iteratively during the site visits, and submitted additional changes. A panel of general officers reviewed the Tactical Blueprint for final changes and approval.

One action especially affected the development of the structure and contents of the initial version of the Blueprint of the Battlefield. This was the decision to organize the Blueprint by seven Battlefield Operating Systems (BOS). The Commanding General, TRADOC required that these seven BOSs be used as the highest level functions of the Tactical Blueprint hierarchical structure. A second action which affected the development of the Tactical Blueprint was DRC's developing an Army Functional Hierarchy in early 1987 that provided many of the functions and subfunctions describing the seven BOSs.

Although the seven BOS were not new in TRADOC, they were largely undefined. The DRC/TRADOC team developed definitions for the BOS. The DCSDOC and Commander, TRADOC approved the definitions, which are listed in Appendix C. These definitions determined the assignment of functions and subfunctions from the Army Functional Hierarchy to the BOSs. The transfer of functions from the Army Functional Hierarchy to the Blueprint required some new superordinate functions to accommodate existing subfunctions, and reinterpretations or renaming of functions included in the Functional Hierarchy. Research and consultations with SMEs in the schools and centers expanded the structure and altered it.

To facilitate the revision process, the Blueprint was represented as an indentured list. That is, each BOS was assigned an ordinal number and its associated subfunctions assigned decimal values corresponding to their level of indenture. Appendix C provides an example of the indentured list format. The Blueprint was maintained on a PC word processor for preparation (and archiving) of each revision.

Workshops were conducted at major TRADOC schools and centers to (1) review the logic of the hierarchical structures, (2) present the concept of a hierarchy of battlefield functions based on BOSs, (3) provide guidelines and criteria for Blueprint revision, and (4) encourage discussions and generate specific changes to the Blueprint. Table 4 shows the agenda for the workshop. Table 5 provides a listing of the workshops conducted in developing the Tactical Blueprint.

Workshop participants were civilian and military staff representatives primarily from combat developments, studies and

Table 4

Agenda for Developing the Tactical Blueprint at Workshops

1. Introductory Briefing

   Purpose of Workshop
   Objective of Blueprint Development
   Assumptions
   Background

      TRADOC Blueprint Objectives
      Applicability of Blueprint to MAA process
      Integration of MANPRINT into MAA process

   Terms of Reference Definitions
   Uses and Purpose of Blueprint of the Battlefield
   Key Concepts and Features of a Blueprint of the Battlefield
   An Example of Functional Hierarchy Development: Maneuver

2. Presentation of Each Battlefield Operating System

   Review of BOS Definition
   Presentation of Major Functions and Subfunctions
   Discussion

      Record Suggested Changes
      Weigh Alternatives
      Develop Consensus

   Record BOS Structure and Functions
   Record Unresolved Issues

3. Hardcopy Preparation of Blueprint Developed During Workshop

   Copies for Workshop Participants
   Update of Strawman Blueprint

4. Data Base Development

   Obtain Task Lists
   Obtain Current Doctrinal Publications

Table 5

TRADOC School and Center Workshops Conducted

Workshop location	1987 Dates	Analysts - participants
Armor Center, Ft. Knox	27 - 28 May	6
Aviation Center, Ft. Rucker	9 - 10 June	10
Infantry Center, Ft. Benning	11 - 12 June	14
CACDA (C^3I Directorate) , Ft. Leavenworth	16 June	10
Field Artillery Center, Ft. Sill	24 - 25 June	11
Logistics Center [a], Ft. Lee	8 July	18
Intelligence Center, Ft. Huachuca	9 - 10 July	5
Signal Center, Ft. Gordon	14 - 15 July	14
Chemical/Military Police Center, Ft. McClellan	16 - 17 July	9
Air Defense Center, Ft. Bliss	21 - 22 July	10
JFK Special Warfare Center, Ft. Bragg	23 - 24 July	4
Engineer Center, Ft. Belvoir	26 - 27 July	9
	TOTAL	120

[a] Included representatives from the Quartermaster School, Ordnance School, Transportation School, Ordnance Missile and Munitions Center, Soldier Support Center, Chaplain School, Logistics Center, and Combined Arms Combat Development Agency

analyses, training and doctrine, and threat branches or directorates at the various schools. Workshop participants were generally knowledgeable of the Concept Based Requirements System, and most had participated in recent mission area analyses or similar studies (e.g., CAMAA, MADP). Many participants were doctrine writers and instructors.

The TRADOC/DRC team consisted of an officer from ODSCDOC (TRADOC), and both a senior military analyst and research psychologist from DRC. The role of this team was to (1) present the purpose, background, and goals of the workshop and (2) moderate and facilitate discussion using the criteria shown in Table 3 to evaluate the Blueprint functions. Team members encouraged participants to base their suggestions for revision on a broad view of the total force operating on the battlefield. At the same time, the participants assessed whether existing subfunctions accommodated the tasks and capabilities of particular concern to their TRADOC school or center. Where existing subfunctions were too restrictive, the TRADOC/DRC team sought alternative functions at the highest possible level of structure. This principle preserved the generic character of the functional structure, accommodated the necessary subfunctions, and avoided redundant subfunctions. Wherever possible, the names of new functions and subfunctions were doctrinal terms or phrases. Every effort was made to use existing definitions, preferably from JCS Pub 1-02, and to avoid inventing new terms.

The team members evaluated suggested Blueprint revisions to avoid the creation of process models that describe the dynamics of combat. With respect to the Blueprint, a process model is a sequence, within one BOS, of functions found in two or more BOSs. The sequence of functions could, for instance, represent temporal order of steps in a procedure. An example would be the placement of command and control, intelligence, and fire support functions and subfunctions within the Maneuver BOS. The avoidance of process modeling focused the search for generic functions, eliminated duplication of functions, and promoted the development of mutually exclusive operating systems.

The major activity of each workshop was a line-by-line review of the seven BOSs of the strawman Blueprint. The results covered a range of changes from the entire restructuring of a BOS function to relatively minor changes to a BOS function (e.g., terminology improvement). In all cases, revision decisions were reached by consensus among the participants. At all workshops, unresolved issues were recorded for later resolution.

At the conclusion of each visit, the workshop team assembled and recorded the structure which was the concensus of participants at that particular school/center. The team recorded copies of interim Blueprints, individual notes, briefing slides, and trip reports to reexamine the Blueprint development process and products. The audit ensured that: (1) the domain of functions and subfunctions (i.e., the entirety of activities that

occur on the battlefield) was preserved through iterative changes to specification of functions and hierarchical organization; (2) the Blueprint was internally consistent and coherent; (3) functions were not duplicated across BOSs; (4) the final Blueprint adhered to design criteria (Table 3); (5) issues recorded earlier either had been resolved or could be resolved; (6) remaining issues were identified for later resolution by a panel of General Officers. The audit included two other activities. The first was the development of definitions for each function and subfunction of the provisional Blueprint. The second was the creation of alternative Blueprint structures suggested by the audit process.

The team assessed the structure to verify that the Blueprint captured the domain of present battlefield functions and could accommodate foreseeable developments (e.g., non line-of-sight weapon systems) while applying the criteria to each function and subfunction definition. The primary sources for definitions were the DoD Dictionary of Military and Associated Terms (JCS PUB 1-02), the Dictionary of United States Army Terms (AR 310-25), other Joint Pubs, and Army field manuals and pamphlets. The audit determined improvements to the functional structure primarily of two types. The first consisted of creating subfunctions necessary for completeness. The second consisted of reviewing the doctrinal literature and abstracting (and in some cases, naming) functions that had not been articulated as functions in these publications.

Since the workshop revision process had resulted in considerable insertion, deletion, renaming, and sorting of Blueprint functions, assessing the net gain in comprehensiveness of the final Blueprint is more subjective than objective. However, one objective measure is the variation in the number of functions from revision to revision. Small changes in the number of functions implies that the domain of battlefield functions had been comprehensively defined. This measure, the total number of functional elements in the Tactical Blueprint, remained quite stable after the second workshop ($\underline{M}$ = 269.2, $\underline{SD}$ = 14.7).

Those issues that were not resolved by modifying the functions of the Blueprint were categorized and listed for later resolution. Issues could be categorized as follows: (a) Titles of operating systems, (b) Definitions of the battlefield operating systems, (c) Inclusion/exclusion of functions, and (d) Placement of functions. Issues are discussed later in this report.

At the completion of the audit, the provisional Blueprint was prepared in both indentured list and graphical formats. The indentured list included definitions of each function. Each workshop TRADOC school or center received, for review, a package consisting of these two forms of the Blueprint. Review and evaluation criteria were the same as those used for the initial Blueprint development. Specific comments addressed the following

questions: (1) given the Battlefield Operating Systems working definitions, is the Blueprint a complete, comprehensive, and doctrinally correct representation of battlefield functions? (2) will the Blueprint accommodate your School or Center tasks and capabilities? In addition, the Combat Developments and Doctrine directorates at Headquarters, TRADOC; the Combined Arms Integration Directorate, Combined Arms Combat Developments Activity; and elements of the Command and General Staff College, Ft. Leavenworth, Kansas, completed reviews based on the first question.

Lastly, the team prepared the final version of the Tactical Blueprint. Specific recommendations by the reviewing agencies for functional or structural changes resulted in further modifications to the Tactical Blueprint. These modifications occurred at the function and subfunction levels subordinate to the BOSs. Suggested changes to the nomenclature of the BOSs, their conceptual basis, or the BOS definitions were issues requiring resolution by a panel of General Officers. The process of organizing and consolidating the issues resulted in three alternative BOS structures, each providing a different basis for resolving the issues. These alternatives offered a means of addressing fundamental Blueprint structural issues in a form that facilitated discussion and decision by the General Officer panel. In addition, new definitions for the Base Case and alternative BOSs were prepared. These alternative sets of seven Battlefield Operating Systems are discussed with the other issues later in the report. The BOS definitions and BOS alternative sets were presented to a TRADOC General Officer panel. The resulting structure, subsequently staffed throughout TRADOC, is at Appendix C. At TRADOC's request, DRC prepared a military publication describing the structure, content, and uses of the Blueprint. It was approved for publication on May 24, 1988 as TRADOC Pamphlet 11-9, Blueprint of the Battlefield. The Blueprint is currently in use and in its third edition.

Methodology for the development of generic tasks. Upon completion of the tactical level Blueprint, it was observed that the lowest level functions were still broader in scope than many collective tasks. In order to ensure the usability of the Blueprint for the purpose of collective training, it was decided to add another layer of detail to the tactical level Blueprint. The elements at this level are referred to as "generic tasks." A generic task is defined as:

> A discrete event or action, not specific to a single weapon system or unit, that enables a function to be accomplished (TRADOC Pam 11-9).

The project team proceeded to systematically examine every branch of the Blueprint to determine whether such generic tasks could be specified. There are 176 functions in the tactical Blueprint for which generic tasks could have been identified. Of these 176 functions, generic tasks were actually identified for

134 of these functions. For example, the following generic tasks were identified for the function "Prepare for Movement" (TA.1.1.1.1) in the Maneuver BOS:

GT1 Conduct personnel and equipment inspections
GT2 Load combat supplies, munitions, and equipment
GT3 Load personnel

It was found that these generic tasks were more understandable to collective training analysts than many of the functions found in the Blueprint.

The method for identifying the generic tasks involved a detailed review of doctrinal manuals and training publications to identify the tasks common to most systems and units that perform a particular function on, or in support of the battlefield. For example, to identify generic tasks for the function "TA.2.2.1.1 Conduct Surface Attack" under the Fire Support Battlefield Operating System, publications on mortars, towed howitzers, self-propelled howitzers, MLRS, etc., had to be studied. Then, the common tasks involved in the employment of each of these systems were identified and labeled.

The generic tasks, while not included in the original publication of the Blueprint of the Battlefield pamphlet in July of 1988, were embedded in the Tactical Blueprint when the pamphlet was republished in April of 1990. A complete list of these generic tasks can be found in Appendix C of this report.

Methodology for development of operational Blueprint. The methodology used for developing the Operational Level of War Blueprint is shown at Figure 3. Analysts followed an iterative process of Blueprint development. The details of development are similar to those of the Tactical Blueprint development, but the players are significantly different.

The project team conducted an extensive literature search on the subject. Based on this search and the experience gained from constructing the Blueprint of the Battlefield for the tactical level of war, the team constructed a strawman Operational Blueprint which they reviewed with experts inside and outside of the Army. The senior service colleges, staff colleges, and selected allies were especially helpful. The School of Advanced Military Studies, the Soviet Army Studies Office, and the Joint and Combined Operations staffs at Ft Leavenworth and various departments at the US Army War College teaching operational art were invaluable sources of expertise and research material.

At the time the Operational Level Blueprint was developed there was virtually no Joint or US Army doctrinal literature available on the conduct of operational art and its activities. However, there were numerous articles in military periodicals on the subject, many by officers currently staffing the faculties

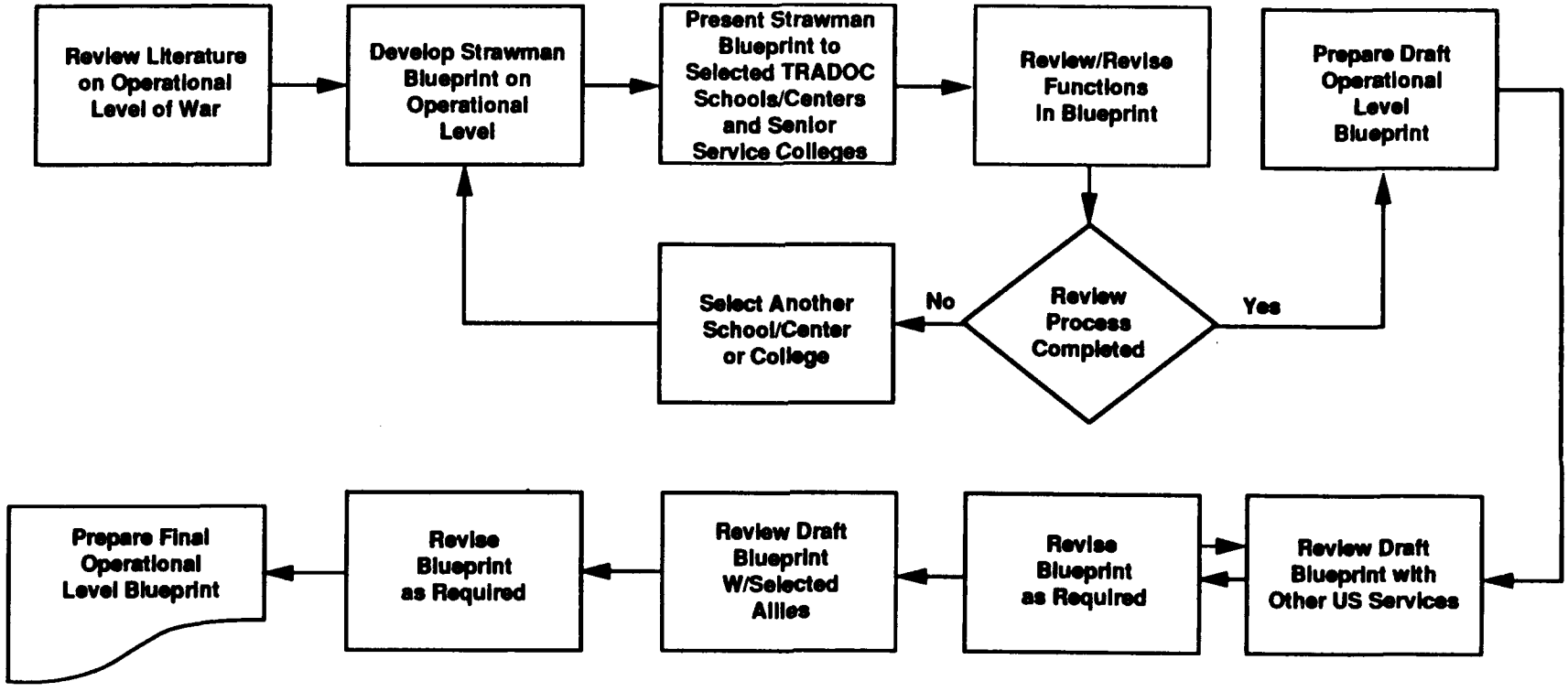


Figure 3. Methodology for development of Blueprint for Operational Level of War.

of the institutions mentioned above. Later, in visiting commands in the field, the team frequently interacted with the authors of these writings. Graduates and former instructors of SAMS and USAWC were especially helpful in providing guidance on the structure and content of the Operational Blueprint. Officers having been instructed in SAMS, C&GSC, and USAWC were just finding their way into the force during the latter stages of developing the Strategic Blueprint.

This iterative process resulted in a draft Operational Blueprint. Research continued throughout the duration of the project. World War II literature and current writings, many on famous campaigns by US, British, Soviet, and German armies, were most helpful.

Frequent meetings were held with the points of contact at HQDA, HQ TRADOC, and ARI. Frequent IPRs were provided the Director, Force Development (DAMO-FD), HQDA, the Deputy Chief of Staff Concepts, Doctrine, and Developments, HQ TRADOC, and the ADCS Concepts and Doctrine, HQ TRADOC. The draft was revised and presented to other US Services and selected allies for review and comment; a similar draft was presented to the combined command in Korea. The draft was revised after each review. The end product is the Operational Level of War Blueprint provided in Appendix B. Also, TRADOC Pam 11-9, Blueprint of the Battlefield was updated with the Operational Blueprint, a discussion of the three levels of war, and chapters discussing applications of the Blueprint and the linkages between the Blueprints.

Methodology for development of Strategic Blueprint. Figure 4 shows the methodology used for development of the Strategic Level Blueprint. Again the methodogy was similar to that of the tactical and the operational levels. The players consulted were different for the most part from those for the other two levels. Key to development of the Strategic Blueprint were the senior service colleges, Army Staff (HQDA), Joint Staff, and various CINC and component command staffs. Selected allies were again consulted. The Army War College played a major role in Strate. gic Blueprint development. The practitioners and teachers of operational art provided valuable insights into functions at the strategic level.

Structure of the Blueprint

Users of the Blueprint should understand the structure of the Blueprint and the logic of its organization. The Blueprint organizes functions in ways that depart from the traditional combat, combat support, and combat service support branch or single service orientations. This paragraph discusses the structure of the Blueprint and the logic of its use. It also describes the relationship between the Blueprint functions and scenarios, missions, conditions, measures and standards.

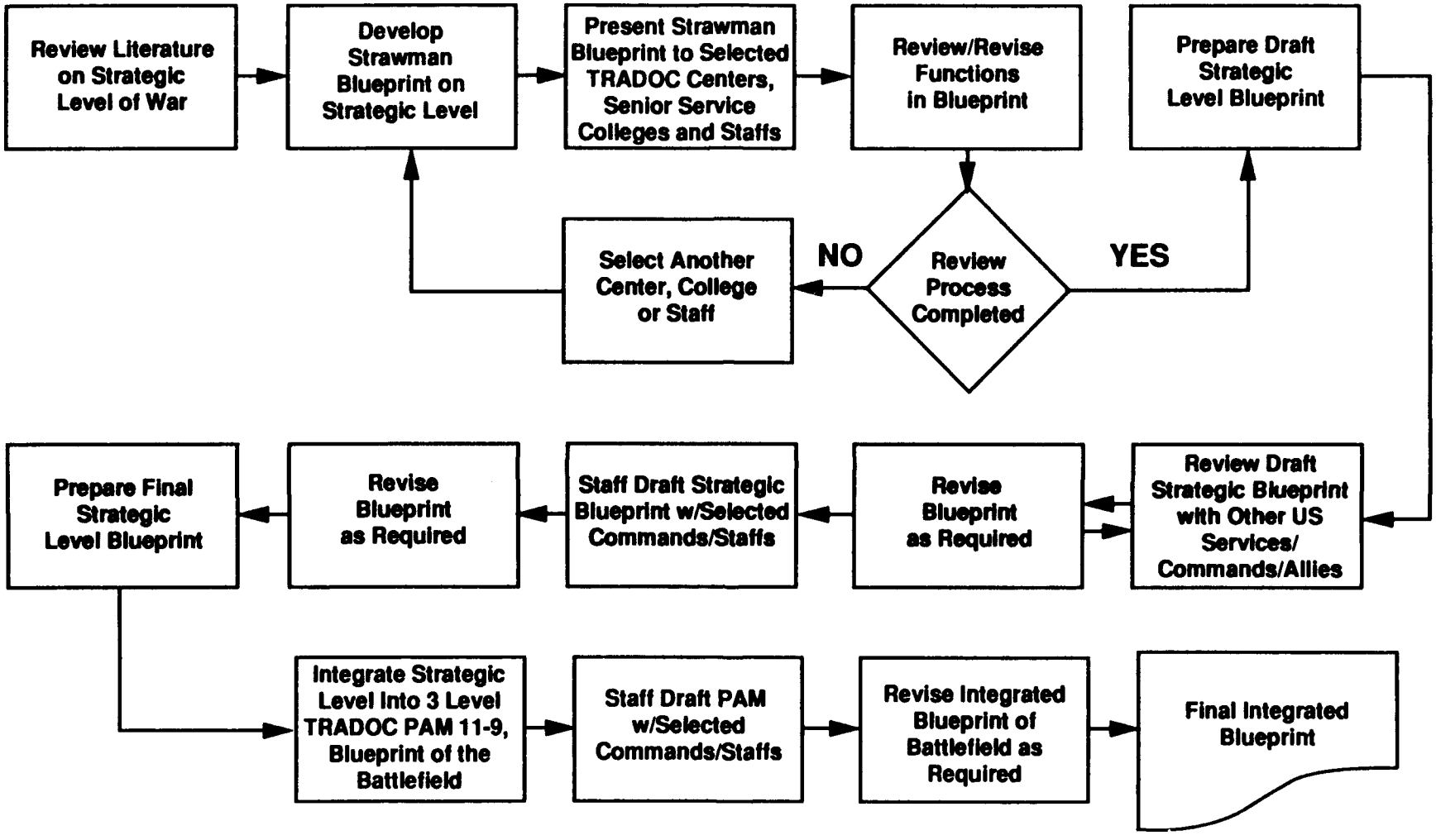


Figure 4. Methodology for development of Blueprint for Strategic Level of War.

The primary structural features of the Blueprint at each level of war are:

Operating systems.
Function and task orientation.
Hierarchical structure.
Applicability across scenarios and missions.
Branch, proponent, and unit or organization independent.

The Blueprint for each level of war is organized by operating systems. Operating systems are the major functions performed at each level of war, for successfully executing operations. Table 1 provides terminology and definitions of Blueprint operating systems for each level of war. For illustrative purposes in explaining the structure of the Blueprint, only the Tactical Blueprint will be used.

As previously discussed, operating systems in the Tactical Blueprint are called Battlefield Operating Systems (BOS) of which there are seven (see Figure 5). BOSs should not be confused with Army branches or proponents. Despite the familiar branch-oriented terminology of the seven BOSs, each BOS includes functions performed by many segments of the force in accomplishing a mission. For example, all segments of a force must perform many of the functions listed in the Command and Control (C2) BOS.

At each level of war, there is a single box above the operating systems. It represents the performance of functions from all operating systems as part of conducting operations at that level of war. For example, at the tactical level, the box represents the performance of the force in executing Blueprint functions in battles and engagements.

Each Blueprint is organized by functions, because functions produce a more efficient structure than do constructs such as missions or operations. For example, the Army's doctrinal literature is often organized around offensive operations such as movement to contact, frontal attack, and exploitation or defensive missions such as defend in sector, defend a battle position, defend a strong point, and delay. Operational constructs such as these do not support systematic analysis. This is due to the fact that each type of mission or operation requires the performance of many of the same functions (e.g., move, engage enemy targets). As a result, mission or operation constructs do not help to simplify the analysis.

The functional structure of the Blueprint provides a means for examining all types of missions and operations in terms of the same basic elements. This promotes a combined arms perspective for the integration of battlefield requirements and capability issues. That is, the analysis of each battlefield

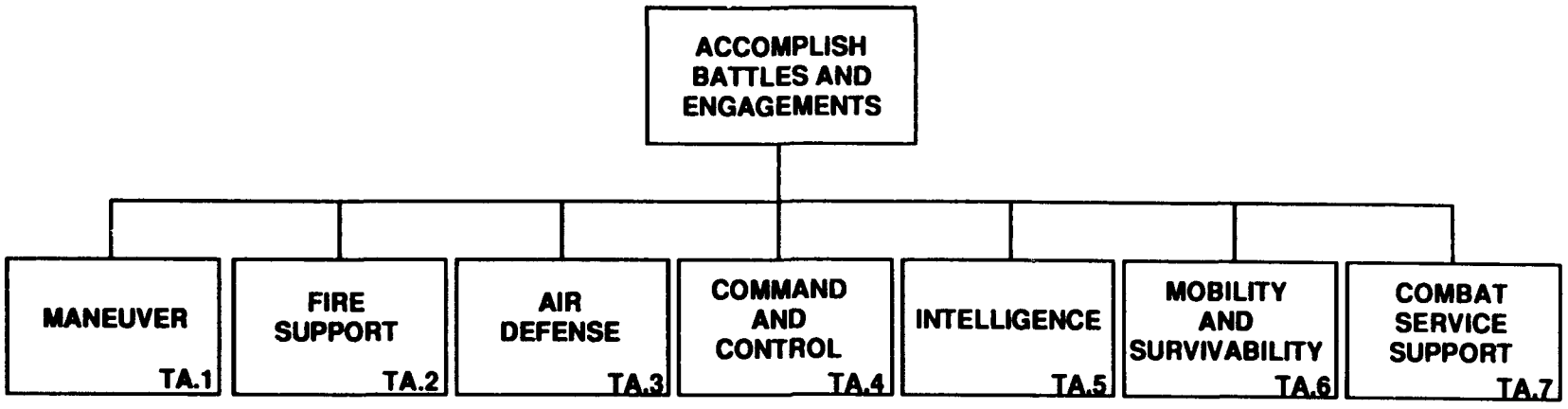


Figure 5. Seven battlefield operating systems (BOS) from the Blueprint for the Tactical Level of War.

function can consider alternative means (i.e., weapon systems, units) for achieving the same result on the battlefield.

The Blueprint maintains its functional character for several levels of detail below the BOSs. These functions specify what the force does on the battlefield rather than how the force does it, or when. In the Tactical Blueprint, battlefield functions are, in turn, disaggregated into generic tactical tasks that can be linked to unit, weapons system, or soldier tasks by particular branches or proponents. Figure 6 shows an example of the relationship among Tactical Blueprint functions, generic tasks, and branch or proponent tasks.

The hierarchical (tree diagram) format of the Blueprint is a straightforward way of breaking the operating systems down into more specific functions. The following are advantages of the hierarchical structure:

- At the upper levels, the Blueprint provides a concise picture of the major combat activities of the force. At the lower levels, the Blueprint provides increasingly greater detail on what the force must do to accomplish missions.

- The meaning of each function in the Blueprint is elaborated by the functions subordinate to it.

- By design, each function in the Blueprint appears only once. For example, while the titles of some functions from different BOSs do resemble one another (Maneuver BOS, 1.2.1.1; Process Direct Fire Targets and Air Defense BOS, 3.1; Process Air Targets), the definitions of these functions clearly distinguish them.

- The hierarchical structure is modular. If the unit or force being analyzed does not perform a given function within a particular scenario, that function "zeros out" without disrupting the rest of the structure.

- The elements of the Blueprint are individually indexed to reflect their placement in the hierarchy. This provides a standard reference system for users (e.g., branch/mission area proponents) to address and report requirements, capabilities, or issues.

The hierarchical structure supports prioritization of functions at all levels of the Blueprint. This is due to the fact that each function in the hierarchy helps to define the functions immediately above it. As a result, any function or generic task

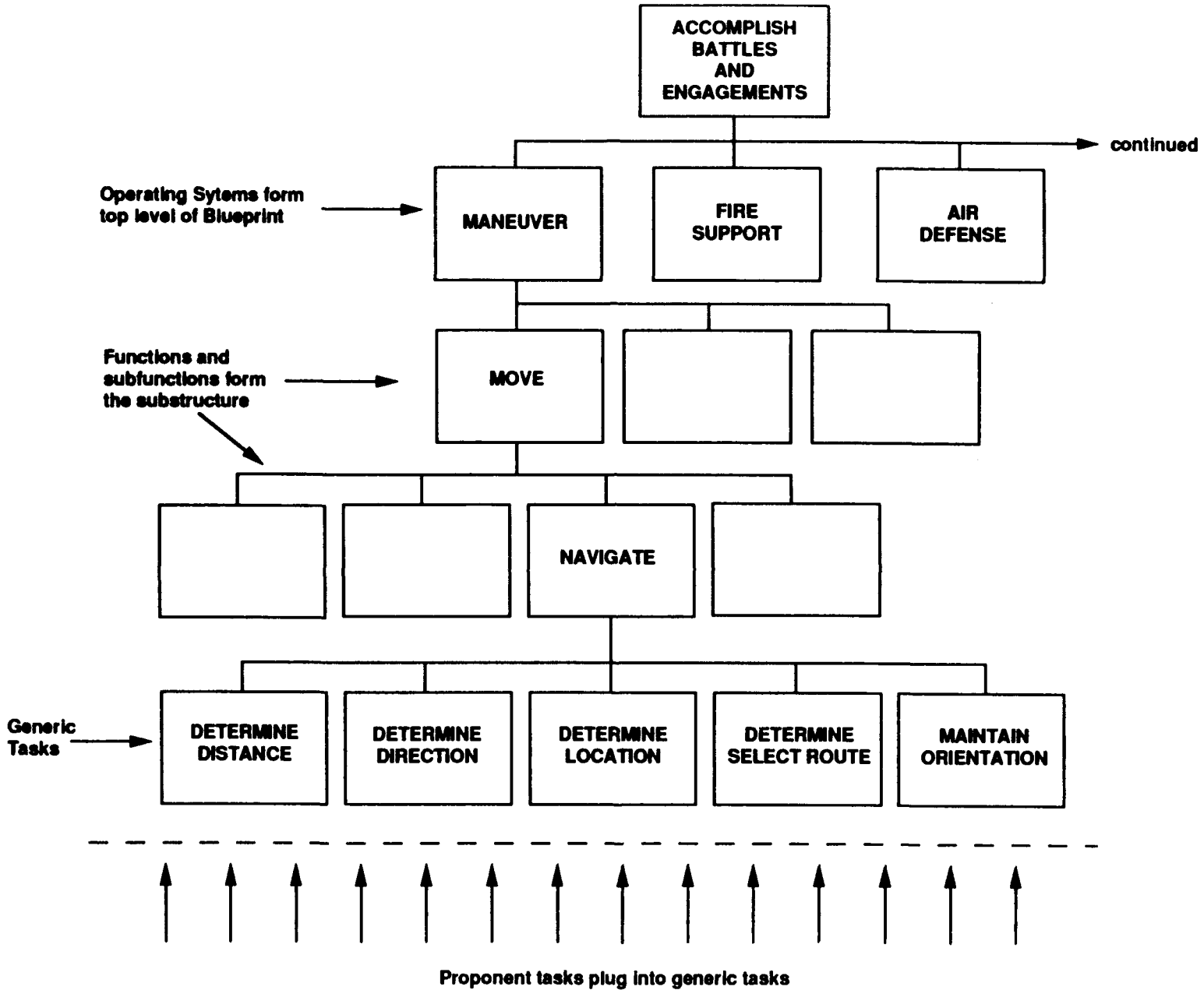


Figure 6. Example: The relationship between functions and tasks in the Blueprint of the Battlefield (tactical level).

can be traced vertically through the hierarchy to determine its contribution to higher level functions and to mission success.

Scenarios. Scenarios are used to examine and analyze the capabilities of forces. The Blueprint is a generic representation of combat activities that does not embody a specific scenario. Rather, the Blueprint is applicable to a wide variety of standard scenarios.

For analysis purposes, scenarios provide the basis for determining the specific missions to be carried out by forces. They also describe the general conditions under which these missions must be executed.

Missions. In the analysis of force capabilities, missions are used to establish required capabilities. These missions, along with the conditions of the battlefield, are often derived from scenarios. Missions generally require capabilities from more than one branch or proponent for their successful execution. Missions vary both in terms of the mix of necessary capabilities and the degree to which particular capabilities are required.

The Tactical Blueprint contains an indexed set of functions representing the domain of combat activities that can be performed by a force at the tactical level of war. A mission statement provides the basis for determining which Tactical Blueprint functions are relevant to achieving a mission. The Blueprint itself is not constructed for a specific mission. The functional, hierarchical organization of the Blueprint permits it to be applied to any mission.

Conditions, measures, and standards. The Blueprint is composed of functions performed by a force in war or in support of that force; it does not include the conditions under which these functions are performed. Conditions, while not part of the Blueprint, influence the difficulty of performing functions on the battlefield. For example, the function of moving on the battlefield may be more difficult at night than during the daytime. Conditions are derived from, and specific to, scenarios and missions.

Measures are not part of the Blueprint. Measures can be identified, however, and used to describe the extent to which combat functions can be performed under a specific set of conditions. Standards are not part of the Blueprint either. Standards could, however, be established for various measures associated with Blueprint functions. A standard describes the minimum criteria for successful performance of a function or task in achieving a particular aim or objective, depending upon the level of war. Standards are keyed to particular scenarios and objectives, and are applied to specific functions.

Understanding the Blueprint

Above paragraphs describe the purposes and structure of the Blueprint. This paragraph provides a general description of how functions are distributed among the operating systems and how connections are made between functions in different operating systems.

For the most part the functions subordinate to an operating system are consistent with combat activities commonly associated with the titles of the operating systems. However, an operating system may appear incomplete because some functions traditionally considered together are divided among two or more operating systems. For example, in the Tactical Blueprint, target acquisition is found in the Intelligence BOS, even though it is a function inherent to employing both direct and indirect fires. There are two reasons for this placement. First, target acquisition is a subset of the more general function of gathering information about the enemy. Second, the hierarchical structure requires that all functions be mutually exclusive, i.e., appear in only one place in the Blueprint. Associating target acquisition with various enemy engagement functions would result in duplication of functions within the Blueprint, making it ineffective for integrating capabilities or requirements in studies and analyses.

If the purpose of the Blueprint were to describe battlefield processes, critical sequences of events, or procedural steps similar to battle drills, then the Blueprint would be a complex flow diagram rather than a functional hierarchy. In that case, functions might be duplicated, since given functions may be building blocks of more than one process. The distinction between the Blueprint (a hierarchy of functions) and a flow diagram is important. The Blueprint is intended to be a catalogue of activities that places functions into logical -- not procedural -- relationships. The Blueprint classifies functions and subfunctions on the basis of similarity of purpose or intent. Therefore, in our example, the gathering of all combat information is contained in the Intelligence BOS. The use of direct fires against ground targets through any means appears in the Maneuver BOS; command and control of every conceivable operation of the Army is covered under the Command and Control BOS, and so on. Similar functional relationships exist in the Operational Blueprint and the Strategic Blueprint.

The fact that functions do have input-output relationships is recognized and built into the Blueprint of the Battlefield functional structure. The Intelligence BOS, as an example, contains report preparation functions. The dissemination of these reports is not an intelligence function; rather, the distribution and use of this information is the domain of command and control elements of the force. Therefore, the Command and

Control BOS contains input functions related to the receiving, transmitting, and using of intelligence and other information.

Issues

In developing the structure for each Blueprint, every effort was made to get a consensus on issues. Most issues were resolved, frequently through an evolutionary process of successive iterations. In the end, all issues were resolved through aggreement or through decision. The last section of this report discusses the major issues addressed during Blueprint development.

Applications of the Blueprint of the Battlefield

Introduction

This section describes several potential applications of the Blueprint and some limitations. The Blueprint also may have applications to doctrine development, training analysis, test and evaluation, unit applications such as readiness assessment, and Operation Plan (OPLAN) or Contingency Plan (CONPLAN) development. For any application of the Blueprint that addresses the performance of Army units, multiple operating systems at one or more levels of war will have to be examined, since units generally perform functions in multiple operating systems.

Applications

Studies and analyses. Studies and analyses performed at TRADOC begin with the identification of battlefield tasks to be examined. In TRADOC Pamphlet 11-8, one of the first steps in a study is to identify the tasks performed by a force or unit that pertain to the problem under consideration.

The Blueprint provides a compendium of functions at all three levels of war from which the analyst can identify those requiring detailed examination. The analyst may also have to prioritize these functions for study.

The hierarchical structure provides a rational basis for making comparisons of Blueprint elements, and may support mathematical methods for assigning relative weights to functions and tasks, and eliminates overlooking critical capabilities or double counting others.

An important goal of the Architecture for the Future Army (AFA) initiative is to integrate the capabilities of the participants during the course of a study. This integration is important because, whereas the capabilities of an individual branch or proponent may be inadequate, the collective capabilities of the Army and other Services may be sufficient to support the execution of the Army's missions. The Blueprint offers a structure for achieving integration by organizing these

capabilities on a functional basis. Capabilities that enable the performance of a given battlefield function are identified from all contributing branches or proponents, Services and allies, and linked to the Blueprint at the generic task or subfunction level. While one branch or proponent may identify a battlefield weakness in performing a function, an Armywide weakness cannot be confirmed until the capabilities of the entire force are aligned with that function. The force's capabilities can then be examined to verify the existence of battlefield needs (deficiencies, opportunities for improvement and preplanned modernization), identify opportunities to exploit threat vulnerabilities, and offer alternative solutions (existing, planned, or feasible).

The Blueprint, particularly the operational and strategic levels, can also be used to assess the ability of unified, joint, Service, and/or combined military forces to achieve strategic military objectives. In this way, it can provide a structure for assessing the relative contribution of various Services or nations and theater military forces for achieving strategic air or objectives.

Scenario development. Scenarios describe the area, environment, forces, and events of hypothetical military conflicts, providing a framework for assessing the capabilities of U.S. forces, equipment, and doctrine. As a result, scenarios generally portray military operations as they might actually occur. The TRADOC regulation on scenario development (TRADOC Reg 71-4, January 1988) states that a scenario "depicts combat situations consistent with approved concepts and doctrine". The Blueprint, by providing a comprehensive list of functions, can serve as a checklist in developing the scenario, and subsequently in the studies and analyses that scenarios are designed to support.

Materiel systems requirements. Requirements documents, (e.g., Operational Requirements Document) specify the capabilities required of future weapons systems, units, training, or doctrine. They specify the functions a system must perform, and they identify the multiple functions that the crew must perform. These documents specify the operational performance characteristics that must be met. While these operational characteristics must be specified at a detailed level (such as Blueprint subfunctions), they must also be linked to operational requirements. For example, operational characteristics for a materiel system might include the maximum rate of movement, operating range, firing range, accuracy, etc. For a doctrinal system, operational characteristics might include increased lethality against enemy armor due to flanking tactics, reductions in enemy armor mobility due to improved countermobility techniques, an increased rate of message traffic in a tactical operations center (TOC) due to improved communications procedures, etc.

The Blueprint may be helpful to the development of these requirements, because the functions are the basis for future battlefield required capabilities.

Doctrine development. The Blueprint can be helpful to doctrine developers in several ways. First of all, the Blueprint provides a comprehensive list of functions performed as part of military operations as well as their definitions. As a result, it can be used to ensure that emerging doctrine will address all functions relevant to the military operations being described, and will do so using common, accepted terminology.

Secondly, the Blueprint and its component operating systems provide a structure for organizing the discussion in some doctrinal publications. For example, in a combined arms doctrinal manual, a discussion of offensive or defensive operations may be followed by a more detailed discussion of the synchronization of specific elements of the operation. This discussion might profitably be organized around the operating systems involved in the subject operation.

Finally, in testing emerging doctrine, whether through map exercises, combat modeling, or training exercises, it is important to examine a large number of functions that contribute to operational success. The Blueprint, along with graphic representations of operational doctrine, can be used to implement a thorough assessment of the doctrine.

Training and education. The Blueprint represents the broad range of combat activities that a force or unit performs while executing its missions. Training developers can use the Blueprint as a structure for determining what needs to be accomplished on, or in support of, the battlefield to support the missions of units for which they are proponent. The Blueprint provides the training developer with a comprehensive list of functions that can serve as a checklist to ensure that all of the critical functions are included in the analyses that support the design and development of training material. TRADOC Pam 351-13 (Systems Approach to Training - Analysis) provides guidance on the use of the Blueprint in the analysis phase of the training development process. In this regard, the Blueprint has been useful in developing unit METL at various echelons in both the active and reserve components.

The Blueprint may also be useful in staff and senior service colleges as a reference text on the three levels of war. It has been useful at C&GSC in developing courses on the operational level of war and in the study of campaign planning.

Test and evaluation. Complex tests can be broken down into smaller subtests for planning and execution purposes by following a top-down path through the Blueprint to a group of logically related functions. Test reports can use the indexing feature of the Blueprint to provide clear statements of what battlefield

functions were addressed in the test and to aid the tracking of test results for functionally related tests.

Unit applications. The Blueprint can be used by unit commanders as a source of topics or framework for leader professional development discussions. These discussions should cover multiple operating systems since each unit performs functions contained in several or all of the operating systems.

It has been used for analyzing sustainment of forces in combat, e.g., how long a corps can fight. The Strategic Blueprint has been used to evaluate Theater Army roles and missions (e.g., post Conventional Forces Europe (CFE) negotiations).

OPLAN/CONPLAN development. The Blueprint is a useful tool for planning various operations and contingency operations, either in deliberate planning or in time of crisis when time is limited and the pressure for immediate action calls for a structured approach. In a crisis, planners do not have the luxury of contemplating what must be done in a deliberate manner. The Blueprint offers a structured way for scanning the functions that must be performed without fear of leaving out a key activity of an operation. Joint/combined forces could be applied to the functions in the Blueprint for determining those best suited to execute those functions. The Operational and Strategic level Blueprints would be most useful for these purposes at the higher staff levels.

Strategy development. Strategies, strategic plans or campaigns require balanced ends, ways, and means. The resources (means) must be adequate to the objectives (ends) and concept (ways). In this regard, the Blueprint provides an excellent analytical resourcing template for the strategic planner.

Limitations

The Blueprint has a number of applications, as described above. In addition, there are some purposes for which the use of the Blueprint may not be appropriate.

Conduct of training. Although there are many appropriate uses of the Blueprint for training development and evaluating training (e.g., NTC uses the BOS), it is not intended for guiding the conduct of unit field training and operations. Sound and time tested tactics and techniques combined with established SOPs and approved doctrine should continue to guide field training and operations.

Concept of operations in plans/orders. The Blueprint at any level is not intended to replace the concept of operations in plans and orders or to structure its content. However, it may be useful to use the Blueprint as a check to ensure an order or plan is complete, if time is available.

Dynamic model of warfare or substitute for training. The Blueprint does not provide a dynamic model of warfare nor does it serve as a substitute for doctrine. It does not describe "how" the Army fights. It only provides a comprehensive listing of "what" activities are performed.

Discussion of Levels of War

Introduction

This section provides definitions of the three levels of war and discussion in order to achieve a common understanding of each level, and to distinguish among the levels in order to understand why particular functions are represented in a Blueprint for a level of war.

Three Levels of War

Definitions. Over the years military thinkers have discussed the nature and numbers of the levels of war differently. The US Army settled on three levels of war, i.e., strategic, operational and tactical, in the 1986 version of FM 100-5. The Joint Chiefs of Staff also adopted the three level of war model and formalized definitions for each of the three levels of war in JCS Pub 1-02 as follows:

> Strategic Level of War is the level of war at which a nation or group of nations determines national or alliance security objectives and develops and uses national resources to accomplish those objectives. Activities at this level establish national and alliance military objectives; sequence initiatives; define limits and assess risks for the use of military and other instruments of power; develop global or theater war plans to achieve those objectives; and, provide armed forces and other capabilities in accordance with the strategic plan.
>
> Operational Level of War is the level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives.

Tactical Level of War is the level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives.

TRADOC Pam 11-9 focuses on all three levels of war. The definitions of the three levels of war underlie the structure for each Blueprint, so the following discussion provides a brief discussion of the three levels of war for a common framework for understanding the levels of war and why various functions are represented at one level or another. This discussion is not intended to be a comprehensive study of the three levels of war. Appendix A provides a reference list.

Aim or objective. Key to understanding the levels of war, and being able to sort out at which level a force, individual, or system is operating, is the concept of aim or objective. In short, a force, individual, or system is at the strategic level if the action being taken is for accomplishing the strategic aim or objective; at the operational level, if for accomplishing an operational aim or objective; at the tactical level, if for accomplishing a tactical aim or objective. Table 11 (Linkage of Blueprints) summarizes the relationship of levels of war to aims or objectives.

At the strategic level of war, the NCA determine national security objectives in the national security strategy and set these and strategic military objectives for the military element of national power. Commanders must consider the use of all elements of power, of which the military is only one. National military strategy governs how the military element of national power accomplish national policy goals and sets theater strategic objectives for the operational level. This pamphlet addresses only military (national and theater) elements of the strategic level. The national (or national security) strategic level, including those elements of national power other than military, are not included except for those activities essential to explaining the full range and interaction of military leaders in discharging their responsibilities in conducting warfare (declared or otherwise) relating to or in support of the battlefield. The national military strategic and the theater strategic components are described separately.

At the operational level of war, commanders of joint Service and combined formations use the forces assigned them to achieve either strategic military objectives selected by the theater strategic commander to support the conflict's political objectives or operational objectives. Operational art concerns the design, organization, and conduct of major operations and campaigns. The essence of operational art is the combination and sequencing of discrete, individual tactical level actions to

achieve a broad common objective, strategic or operational. No particular echelon of command is solely or uniquely involved, since the operational level of war properly relates to the strategic aim, not the size, echelon, or type of the formations involved. An operational level commander sets achievable, specific tactical military objectives for tactical commanders in the context of the unified commander's theater strategy or campaign; he does this by sequencing operations in his subordinate campaign plan.

At the tactical level of war, commanders establish tactical military objectives for governing battles and engagements in the context of the operational level subordinate campaign plan. Achievement of tactical military objectives will enable the successful accomplishment of operational objectives and could permit the exploitation of tactical success for achieving strategic aims.

Thus, strategic level of war objectives are used as a basis for establishing operational level objectives and operations to achieve these objectives. The vertical linkage among objectives at each level of war provides a basis for relating and comparing functions at one level of war with functions at other levels of war. Vertical relationships across the Blueprints are discussed briefly in the section on Linkages.

Theater structure. In addition to the strategic aim, the concepts of theater, theater (or area) of war, and theater (or area) of operation are helpful in understanding the distinctions between the strategic and operational levels of war. See FM 100-7 for a complete discussion of theater structure.

JCS Pub 1-02 defines a theater as the "geographic area outside the continental United States for which a commander of a unified or specified command has been assigned military responsibility." It goes on to define an area (or theater) of war as "that area of land, sea, and air that is, or may become, directly involved in the operations of war." It defines a theater of operations as "that portion of a theater of war necessary for military operations and for the administration of such operations." Thus, a theater of war may contain more than one theater, or area, of operations.

The operational level of war Blueprint must be robust enough to permit analysis of two situations within the context of a theater of war. Table 6 describes these two situations, i.e., theater(s) of operations (large forces in a developed, or undeveloped, theater) and areas of operations (smaller forces in a relatively small area).

The unified, or theater, Commander-In-Chief (CINC) is normally at the strategic level of war working to ensure that the military element of power works with the other elements of national power to achieve the desired national security or

strategic military objectives. The theater of operations commander, however, is at the operational level of war, concentrating on applying the military power in his theater of operations toward the strategic military objectives assigned by the theater CINC. The CINC of a unified command receives broad strategic objectives from the National Command Authorities and translates them into a theater military strategy, or a broad strategic plan, for his theater. The theater CINC also develops theater campaign plans. The theater of operations commander then designs subordinate campaigns to achieve the assigned strategic military objectives and his own operational objectives. For a combined command, the wartime CINC would receive his guidance from the alliance, e.g., SACEUR's guidance from NATO.

Table 6

Scope of Operational Level of War

Within a theater of war the operational level includes theater(s) or area(s) of operations

- **Large forces in a developed (or undeveloped) theater**
- **Example: AFCENT in allied command Europe**

- and, or -

- **Smaller forces in a relatively small area**
- **Example: JTF in Grenada**

Relationship of commands to levels of war. As discussed above, purpose or aim determines at which level of war a commander or an organization is operating, not just size, echelon, time, and distance factors. However, as a general rule certain commanders operate at particular levels of war. Table 7 summarizes evolving doctrine regarding the relationship of commands and commanders to the three levels of war.

Theater commanders are normally considered to be at the strategic level of war, but they may operate at the operational level. Theater (or area) of operations commanders are at the operational level.

The operational level of war generally applies to Army forces as small as a corps in an area of operations or as large

as army groups and theater armies in theaters of operation within a theater of war. A Joint Task Force (JTF) in an area of operations, as part of a theater of war, is at the operational level.

The theater commander is responsible for the COMMZ, but the theater of operations commander is responsible for that portion of the COMMZ in his area of responsibility (AOR). Therefore, those activities (functions) in the COMMZ under the responsibility of the theater of operations commander are considered to be at the operational level of war.

Army groups (AG) are considered to be at the operational level of war; evolving Army doctrine places them there, as well. CINCs are considered primarily strategic commanders, and they can be at the operational level.

Table 7

Relationship of Commands/Commanders to Levels of War

	Level of war		
Command or commander	Strategic	Operational	Tactical
Theater (CINC) *	X	X	
Theater or areas of operations		X	
Service component command		X	
Theater Army (TA)		X	
COMMZ**	X	X	
Commands performing function in COMMZ or theater Army		X	
Army Group (AG)		X	
Field Army		X	X
CORPS***		X	X
Joint Task Force (JTF)**		X	X

Note: * A unified command CINC primarily operates at the strategic level; however, the CINC can be at the operational level of war.

** Theater commander establishes COMMZ and is overall responsible for COMMZ; theater of operations CDR is responsible for COMMZ in his area of responsibility.

*** In a theater or area of operations within a theater of war, a corps or JTF CDR could be an operational level commander or a tactical level commander. The size of JTF varies.

Table 8 summarizes some characteristics of the operational level of war. As pointed out above, the operational level of war properly relates to the strategic aim, not to the size, echelon, or type of the formations involved. Also, the perspective found in the Operational Blueprint is one of joint and combined operations.

Table 8

Some Characteristics of Operational Level of War

- **Translates theater CINC's strategic aim(s)/military strategy into clear military objectives**
- **Conducts campaigns and major operations oriented on enemy's center(s) of gravity**
- **Commits forces to or withdraws them from battle; sets conditions for success; groups forces; sequences successive battles and engagements; determines application of resources**
- **Operational level forces can be large or small formations within a theater or area of operations**
- **Forces are usually joint and often combined**
- **Purpose determines if a force (unit/system) is at operational level of war - not just size, time, and distance factors**
- **Provides direction to tactical forces and is aware and may interact with other elements of national power (e.g., political, economic)**
- **Includes close, deep, and rear operations**

While there are clear distinctions among the three levels of war, there are also some parallels among the functions at all levels. These parallels are particularly evident between the operational and tactical levels. For example, while maneuver at the tactical level of war refers to a situation for employing ground forces "to achieve a position of advantage" relative to enemy (tactical) ground forces in battle, movement and maneuver at the operational level of war refers to a situation for disposing joint and/or combined forces in "securing the operational advantage of position before battle is joined or exploiting tactical success" within the theater of operations.

In addition to the distinctions among the three levels of war, there are some gray areas between the levels which make it difficult, at times, to clearly state whether some activity is at one or the other of adjacent levels of war. As a result, some of the same activities can be found at the margin of two adjacent levels of war, giving the impression of overlap between the levels of war. This situation is illustrated in Figure 7. For

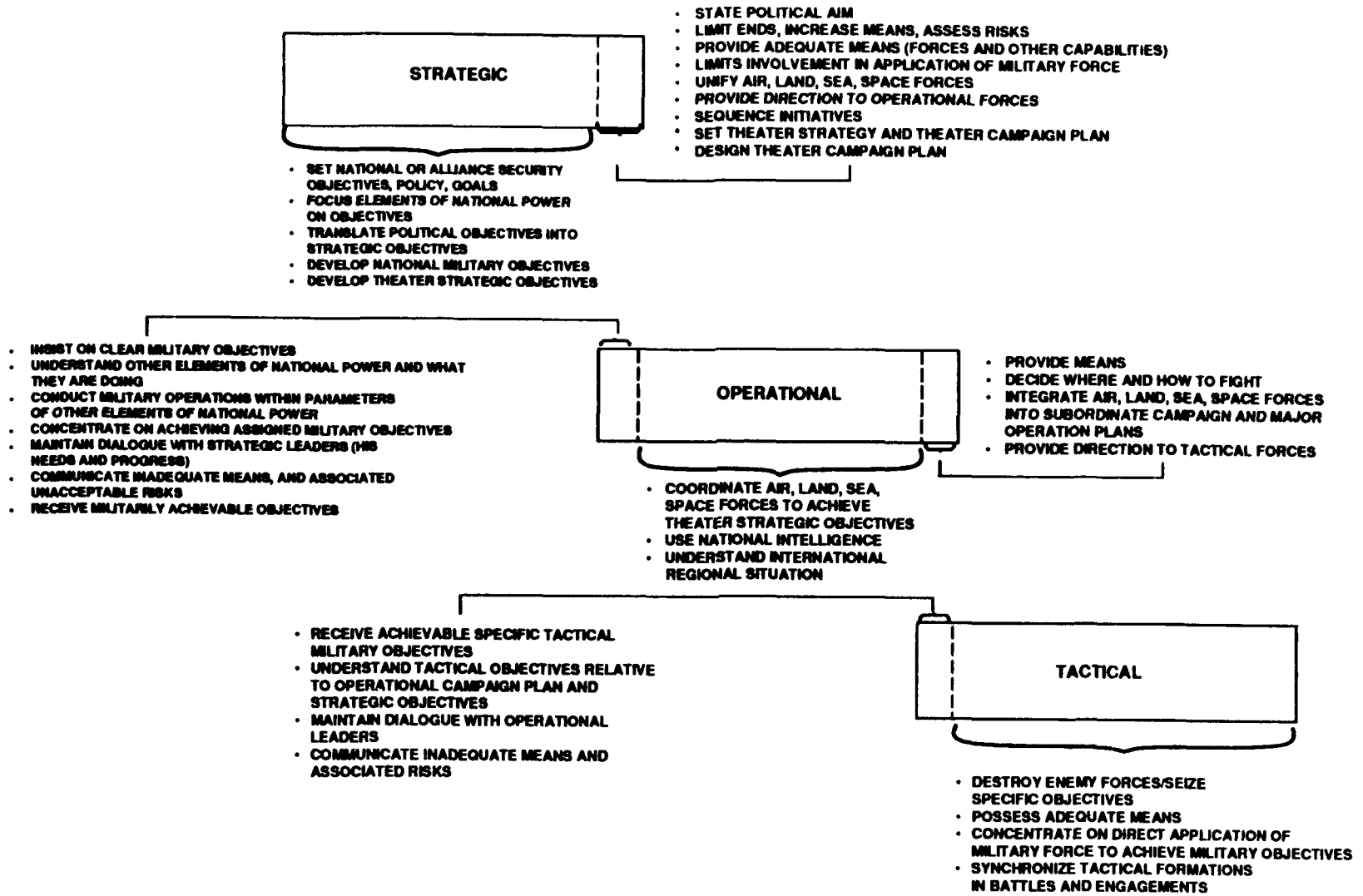


Figure 7. Levels of war are related but distinctive.

example. the operational level includes the function of monitoring the strategic situation (OP.4.1.4). Clearly, a similar function will exist at the strategic level of war but from a different perspective.

The next three sections provide brief discussions of the Blueprints for each of the levels of war. The emphasis in these sections is on the uniqueness of the functions at each level of war. In addition, a subsequent section discusses the vertical linkages among functions in the Blueprints for the three levels of war.

Discussion of Blueprint for the Strategic Level of War

Purpose

This section of the report provides a general description of the hierarchical structure of the Blueprint at the Strategic Level of War. The section describes operating systems in general and each of the operating systems for the Strategic Level Blueprint specifically.

Strategy Formulation

This paragraph provides a context for the Strategic Blueprint and a brief discussion of strategy formulation and terminology. Figure 8 outlines the principal ingredients in formulating strategy. The Strategic Blueprint adheres to this terminology and model.

Nations, like individuals, have interests derived from their innate values and beliefs, or national purpose. These enduring values and beliefs define national interests and a nation's perceived needs and aspirations. Hence, U.S. national interests determine our involvement in the rest of the world and is the starting point for national security policy and strategy formulation.

After determining U.S. national interests, the next step in formulating national security strategy is to assess the situation to determine the significant threats, trends, and realities, etc. affecting U.S. interests. To secure our national interests, the national political leadership establishes goals, objectives, policies, and strategies. National security policy then is a broad course of action or statements of guidance adopted by the government at the national level in pursuit of national objectives. It is from these national policies that strategy evolves. There are different kinds of strategies, but all complete strategies employ the same thought processes and contain the same elements: ends, ways, and means.

National security strategy is a collective term encompassing both defense and foreign relations of the United

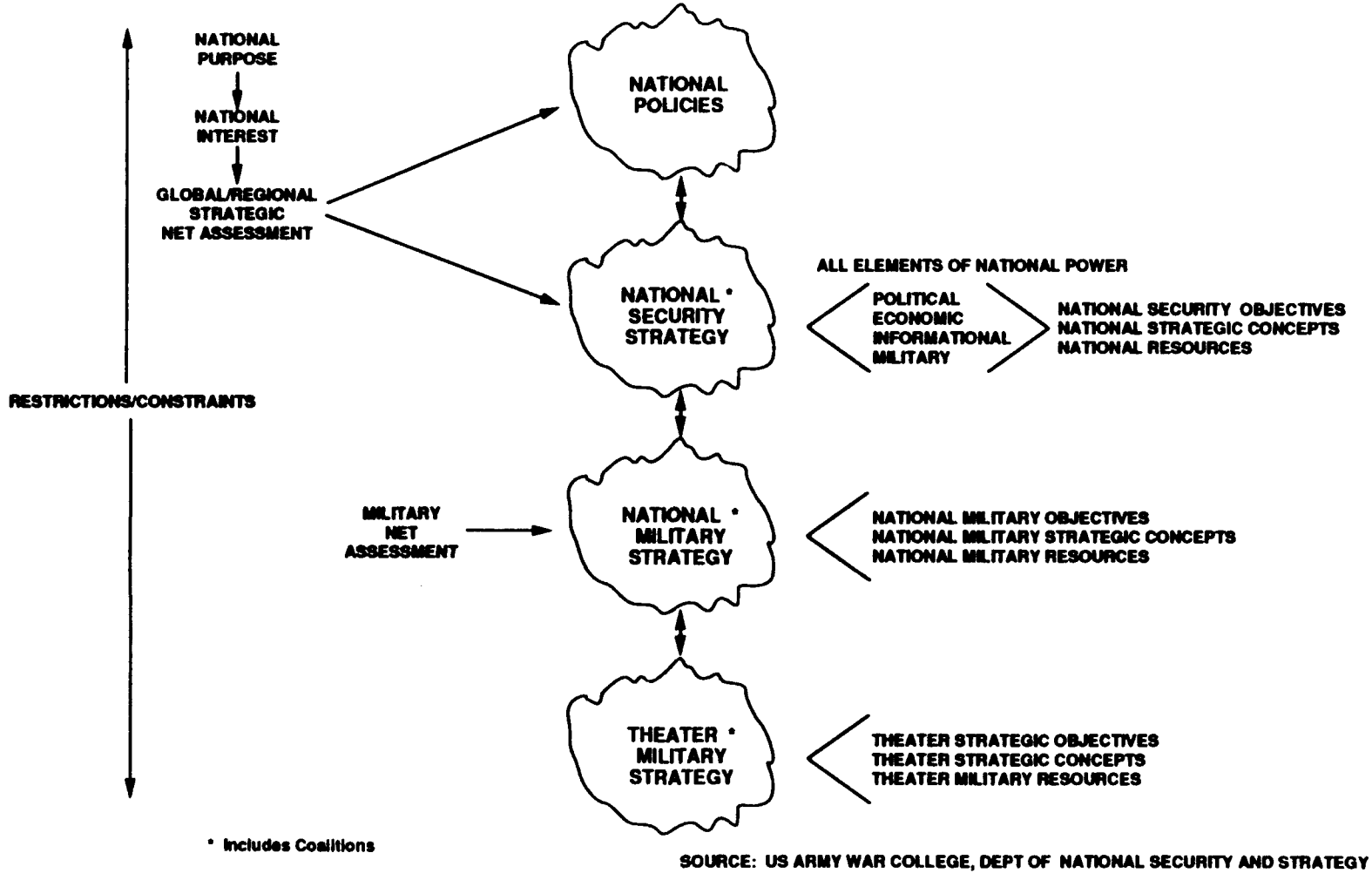


Figure 8. Strategy formulation.

States. National security is comprised of four elements of national power, as shown. National security strategy is the art and science of developing and using the political, economic, informational powers of a nation, together with its armed forces, during peacetime and wartime, to secure national security objectives.

National military strategy is meaningful only in the political context. It is the art and science of employing the armed forces of a nation to secure the objectives of national security policy by applying force or the threat of force. National military strategy defines the military objectives to be achieved, the strategic concept (broad course of action) or ways military power might be used, and the military resources or means identified.

The next step is to conduct a risk assessment. If resources are deemed insufficient the strategy must be revised. Ends, ways, and means must be balanced. Finally, CINCs define their theater strategy as military objectives, concepts, and resources.

Figure 9 places the Blueprint in the context of the three levels of war. The Strategic level Blueprint addresses only the military aspect of the four elements of national power, i.e., the military element. Table 9 defines the scope of the Strategic Blueprint.

Operating Systems

The Strategic Level Blueprint is organized in two parts which describe functions for the military portion of the strategic level of war. Those functions or activities pertaining to the elements of national power other than the military element are beyond the scope of the Strategic Blueprint. Strategic operating systems are the major functions performed at the national military (Part 1) and theater strategic level (Part 2) by civil and military organizations and unified, joint, or combined strategic forces for successfully executing strategic plans.

Part 1: National Military Strategic Operating Systems

Part 1 of the Strategic Level Blueprint details seven operating systems (See Figure 10). The functions and subfunctions cover activities performed by the military departments, Chairman of the Joint Chiefs of Staff and Joint Staff, and unified, joint or combined forces. "Forces" includes all types of forces, including special operating forces (SOF), and resources. The seven operating systems form the uppermost structure for Part 1 of the Strategic Level Blueprint.

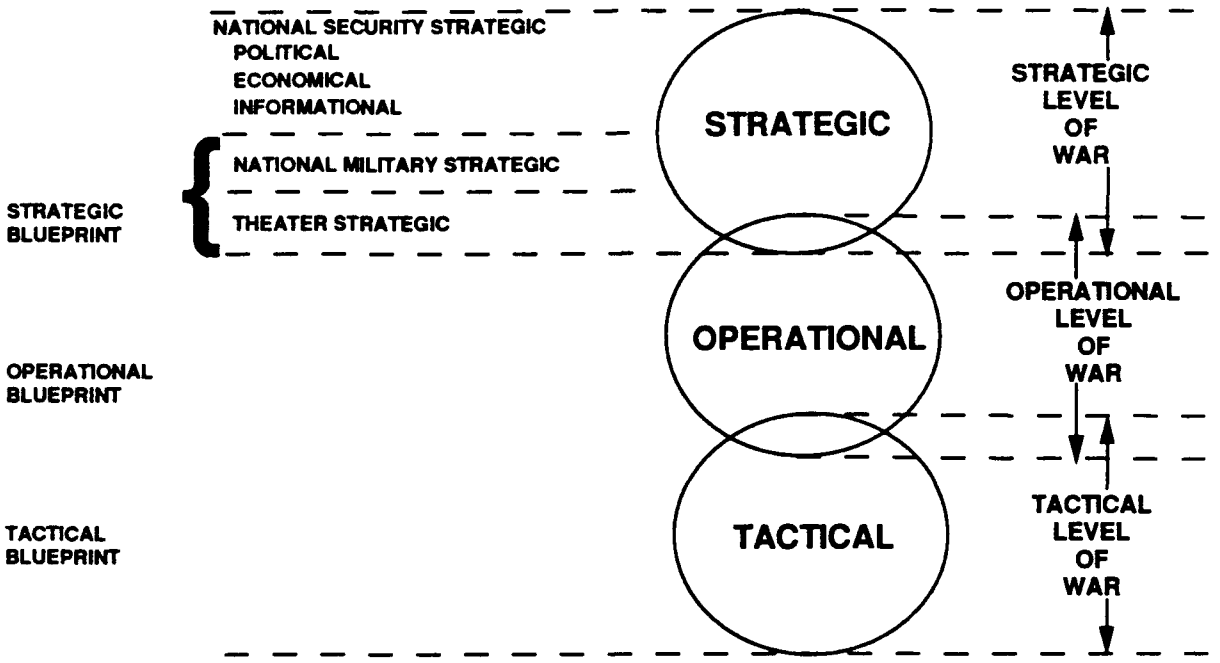


Figure 9. Blueprint and the levels of war.

Table 9

Scope of Strategic Blueprint

- Strategic level of war includes all elements of national power
  - Political
  - Economic
  - Informational
  - Military
- Blueprint covers only military
  - But does show functions interacting with other Elements of power
- Strategic level blueprint shown in two parts
  - National military strategic functions
  - Theater strategic functions

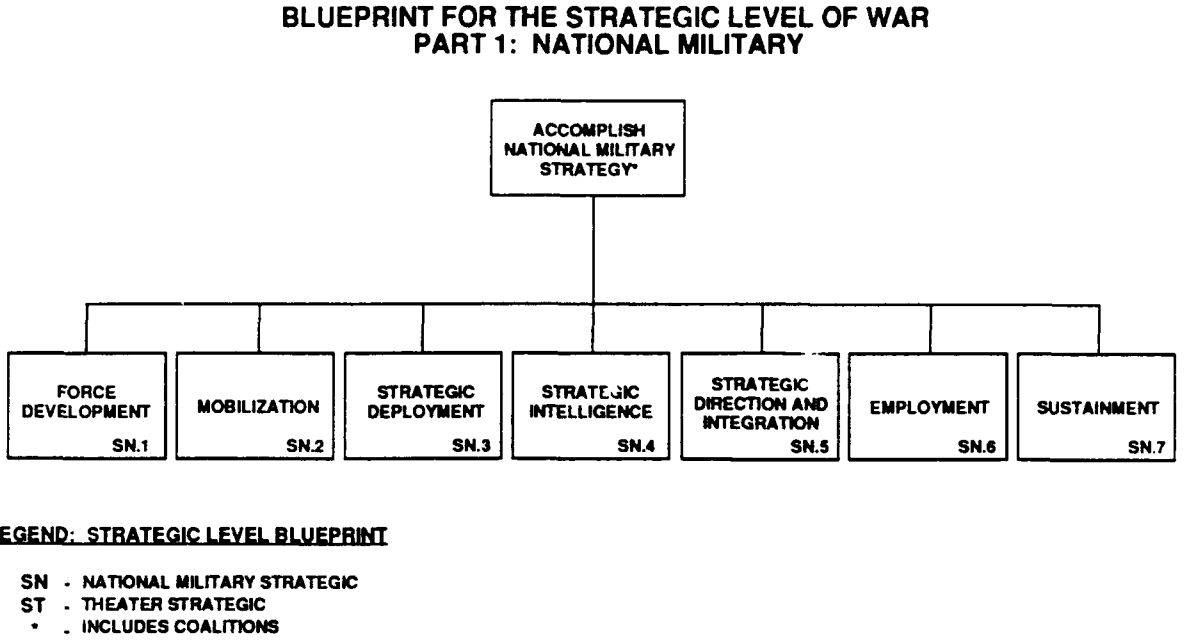


Figure 10. Seven national military strategic level of war operating systems.

The following paragraphs discuss each of the seven national military strategic operating systems and provide a graphical representation of the subfunction structure of each. Appendix A, Part 1 contains the definitions of these seven operating systems functions and subfunctions.

Force development. The Force Development strategic operating system (See Figure 11) is the translation of projected military department and Service manpower, fiscal, and material resources into time-phased programs and structure (expressed in dollars, equipment, and units) necessary to accomplish assigned missions and functions. It includes the formulation of warfighting concepts (e.g., Army umbrella concepts) and analysis resulting in prioritized Service requirements. The Force Development strategic operating system with functions and definitions is at Appendix A.

This operating system includes developing new or revised unit/organizational models, determining the size of the above-the-line combat force and developing the below-the-line support force structure for executing the national military strategy. It also includes documenting unit authorizations, training the force (soldiers, leaders, and units) through developing programs and assessing their effectiveness. The training function is based on an analysis of the organization's wartime mission and associated

STRATEGIC LEVEL BLUEPRINT
PART 1: NATIONAL MILITARY

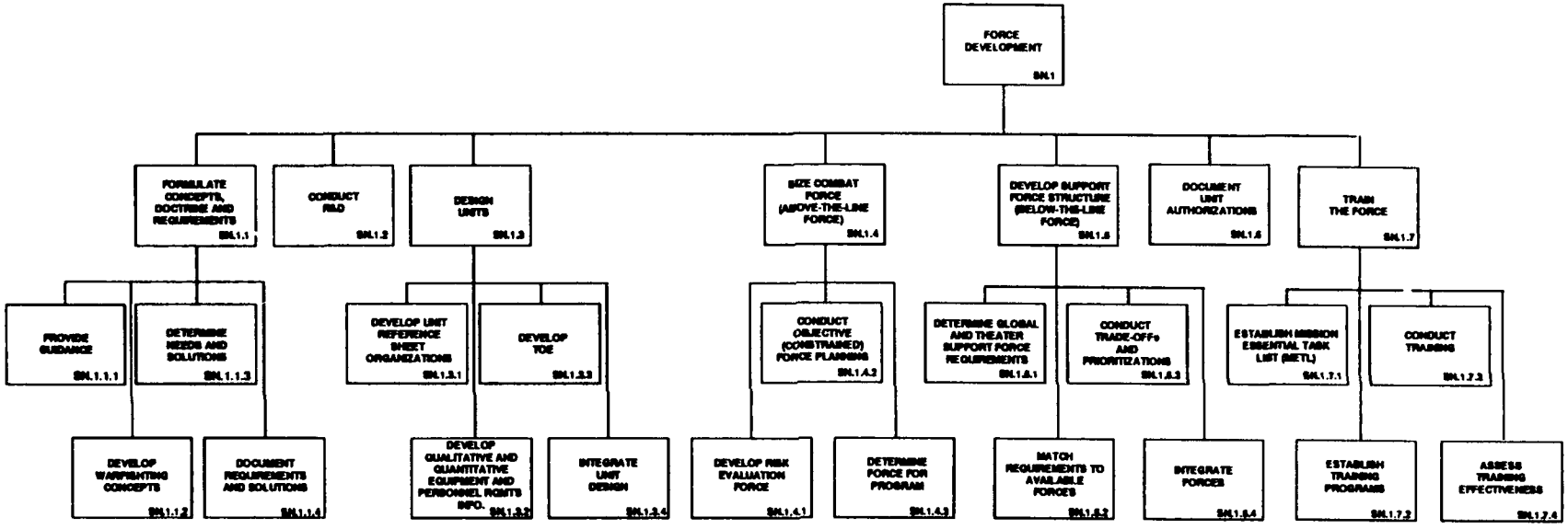


Figure 11. Force Development operating system.

tasks. However, the acquisition of personnel, materiel, facilities, and services is covered in the Sustainment operating system. In summary, the force development operating system represents the activities of warfighting concept development, doctrine and combat developments, sizing and structuring the force, and finally training that force for deployment and employment to warfighting CINCs.

Mobilization. The Mobilization operating system (See Figure 12) provides the activities of assembling and organizing national resources to support national objectives in time of war or other emergencies. The Mobilization operating system with functions and definitions is at Appendix A.

It includes those activities associated with alerting and preparing the Reserve Components (RC) for mobilization, and anticipating their reception as activated units. This operating system includes the functions associated with expanding the CONUS sustaining base, i.e., expanding mobilization stations (MS), training base, logistics support (army production base, national industrial base, military construction), medical support, the transportation system, and other support. Activities associated with mobilization end when a unit is evaluated as operationally ready for deployment at the MS, although additional preparation at the MS may continue while units await deployment orders.

Strategic deployment. Strategic Deployment is the relocation of forces to achieve strategic advantage through strategic mobility into desired theaters in accordance with national military strategy. Strategic Deployment activities, or functions, include a unit's movement from the mobilization station/site, activities en route to its designated sea/aerial port of embarkation, to include marshalling area activities, and activities through its port of debarkation and linkup in the marshalling area in the theater where the unit prepares to move to its wartime location. Figure 13 shows the functions of Strategic Deployment. The Strategic Deployment operating system with functions and definitions is at Appendix A.

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PART 1: NATIONAL MILITARY

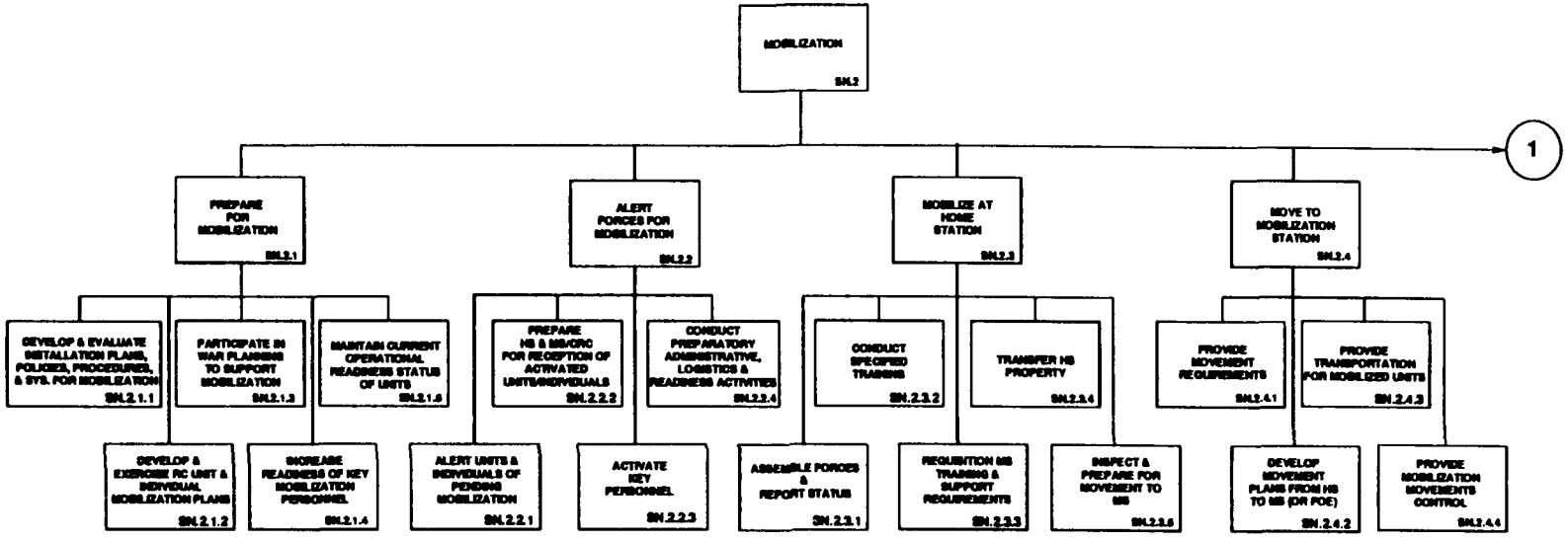

Figure 12. Mobilization operating system.

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PART 1: NATIONAL MILITARY

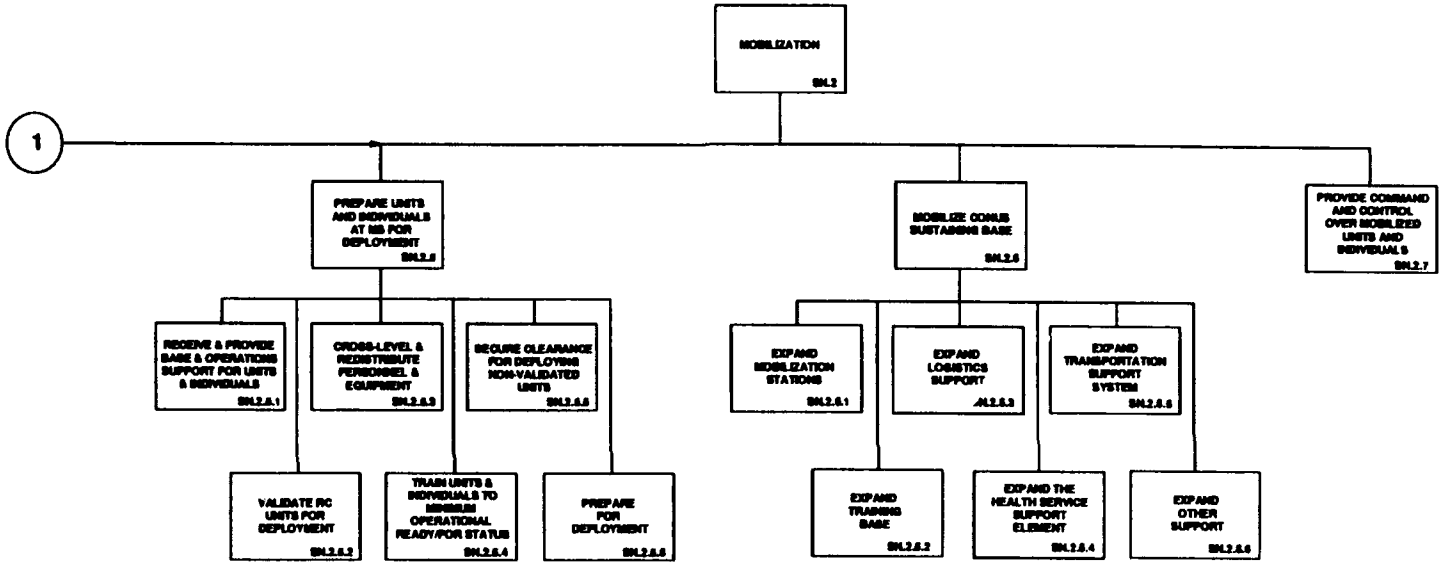

Figure 12. Mobilization operating system (continued).

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PART 1: NATIONAL MILITARY

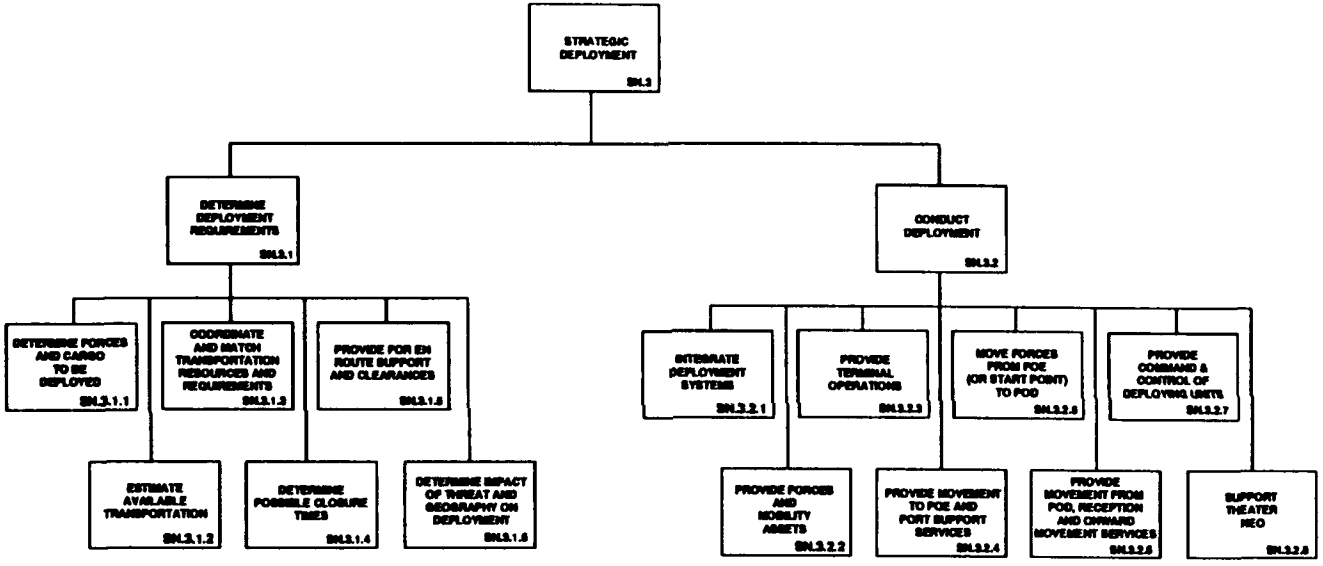


Figure 13. Strategic Deployment operating system.

The Strategic Deployment operating system pertains to deployment requirements including the forces (units and individuals) and resources to be moved and the strategic mobility assets required to move them to theaters worldwide in a timely manner. This operating system also includes the actual conduct of the deployment, i.e., functions relating to terminal operations and support services, and the command and control of deploying units and individuals, and applies to intertheater movement.

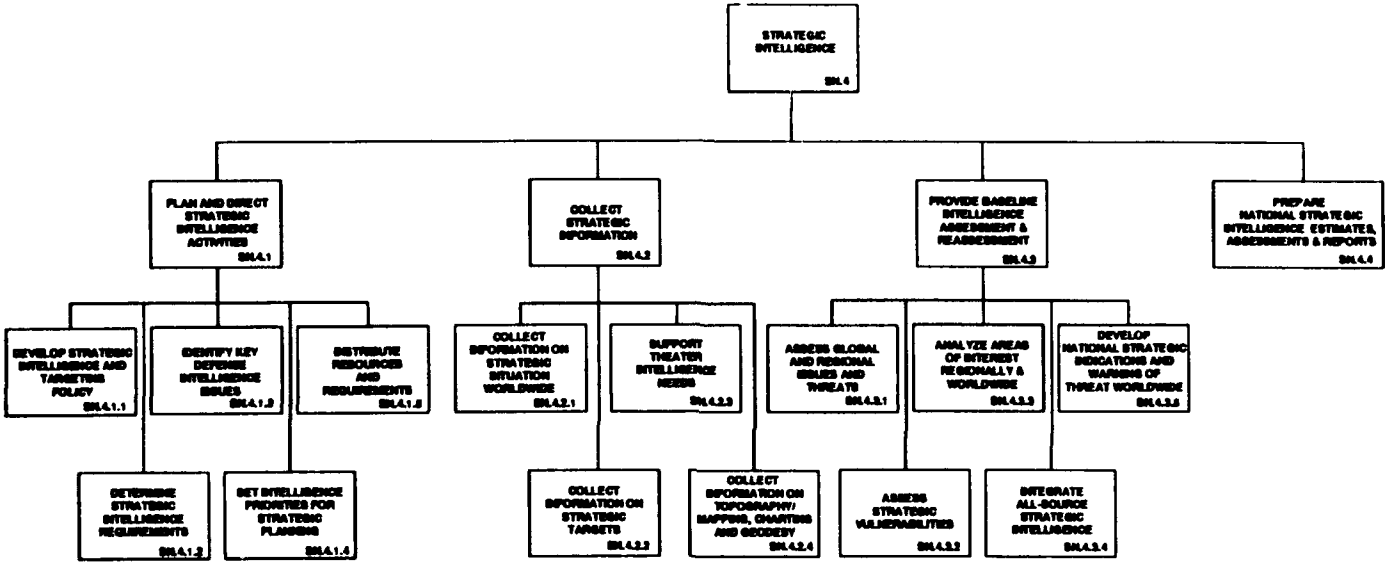
Strategic deployment is the function of the relocation of forces to a theater from CONUS or another theater for subsequent staging or marshalling, and posturing for subsequent movement and employment by the combatant commander. An example of strategic deployment as a national military function is the deployment of forces from CONUS to Europe to staging or marshalling areas for subsequent posturing and preparation for combat.

Strategic intelligence. The National Military Strategic Intelligence operating system (See Figure 14) develops intelligence required for the formation of policy and military plans at national and international levels. It includes planning and directing strategic intelligence activities for setting strategic intelligence and targeting policy, determining requirements and priorities and distributing strategic intelligence resources. This operating system includes the determination of available mapping, charting and geodesy (MC&G) products to satisfy strategic MC&G requirements. The Strategic Intelligence operating system with functions and definitions is at Appendix A.

Strategic Intelligence in Part 1 includes the collection of strategic information for assessing the worldwide and regional threats in order to conduct national military strategy reviews. It covers enemy and friendly vulnerabilities, and indications and warning. This operating system includes the preparation and dissemination of strategic intelligence.

Strategic direction and integration. Strategic Direction and Integration operating system is the guidance expressed through revised national (and alliance) military strategy, derived from national security strategy, relative to the attainment of strategic objectives. These with the theater strategy integrate national ends, ways and means. The Strategic Blueprint assumes the existence of a national military strategy; the operating systems and their functions have as their output the accomplishment of the existing national military strategy. However, it deals primarily with reassessing and revising the strategy and other activities. Figure 15 shows the functions of the national military Strategic Direction and Integration operating system. The Strategic Direction and Integration operating system with functions and definitions is at Appendix A.

STRATEGIC LEVEL BLUEPRINT
PART 1: NATIONAL MILITARY



NOTE: For disseminating national strategic intelligence, see Function SN.5.1.1 Communicate Strategic Information.

Figure 14. Strategic Intelligence operating system.

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PART 1: NATIONAL MILITARY

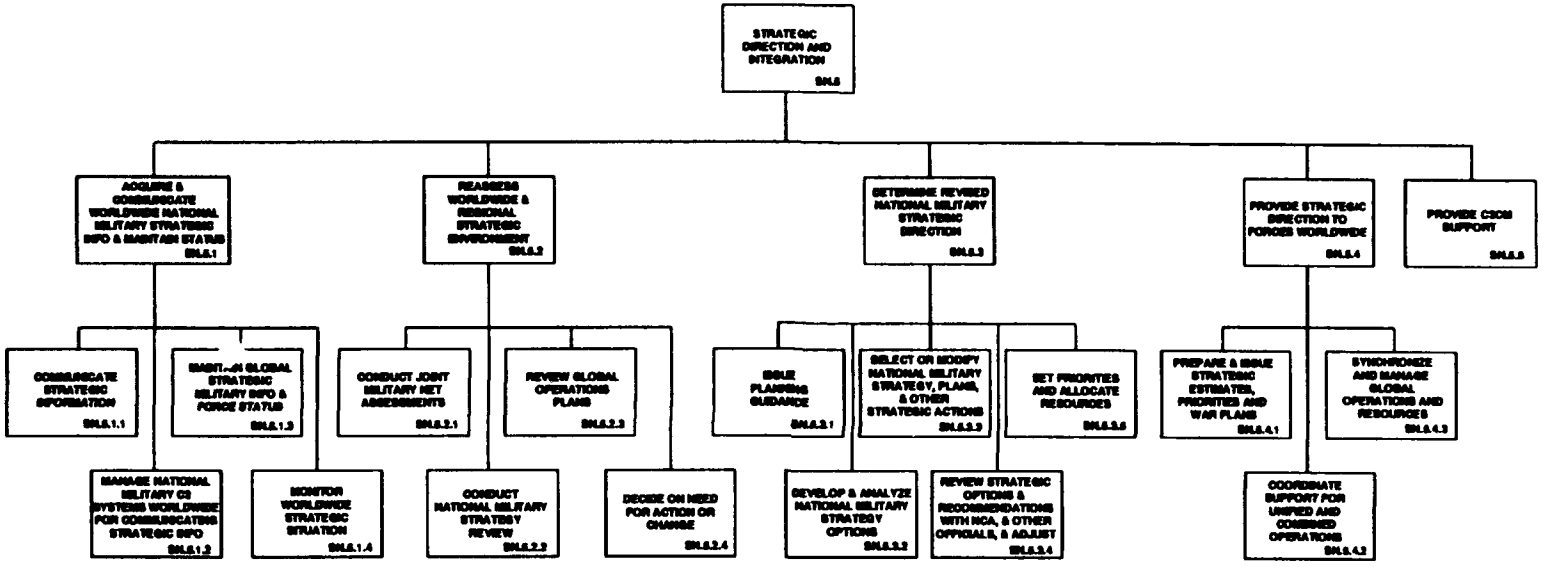

Figure 15. Strategic Direction and Integration operating system.

This operating system includes the functions of acquiring and communicating information and data on the strategic situation worldwide, and reassessing the strategic security environment. This includes conducting net assessments and national military strategy reviews, revising plans, providing planning guidance, developing and analyzing strategy options and selecting an option to include setting priorities and resources (and the very basic function of deciding whether a change in strategic direction is needed). Additionally, it includes the activities associated with providing strategic direction to forces worldwide including the synchronizing of global operations and resources. Finally, the Strategic Direction and Integration operating system includes providing worldwide command, control, communications countermeasures support worldwide. The subfunctions of C3CM (e.g., intelligence support) are covered elsewhere in the Strategic Blueprint.

Employment. The National Military Employment operating system is the application of military forces worldwide at the strategic military level to accomplish the objects of the national military strategy. Figure 16 shows the functions of the Employment operating system, and the functions and definitions are at Appendix A.

Employment includes the conduct of strategic fires, strategic protection, and the provision of support to the Department of Defense, other governmental agencies, and to other nations.

Protection includes strategic air and space defense, protection for the homeland, deception, assistance for civil defense, and force and means security activities. Employment includes other activities such as supporting civil affairs and the evacuation of noncombatants from theater. Strategic maneuver, which might have been ascribed to national military employment, is considered a theater strategic function (see operating system ST.5 Intra-Theater Strategic Movement and Maneuver in Appendix A).

Sustainment. The Sustainment national military operating system is the ability to maintain the necessary level and duration of military activity to achieve national security objectives. Sustainment is the function of providing and maintaining those levels of force, materiel, and consumables necessary to support the national military strategy in CONUS and theaters. Figure 17 graphically shows the functions of the national military Sustainment operating system, and the functions with definitions are at Appendix A.

Sustainment includes the provision of personnel, logistics, and other support required to maintain and prolong operations or combat until successful accomplishment of the national objective or revision of the mission. Sustainment pertains to those support functions associated with the CONUS sustaining base

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PART 1: NATIONAL MILITARY

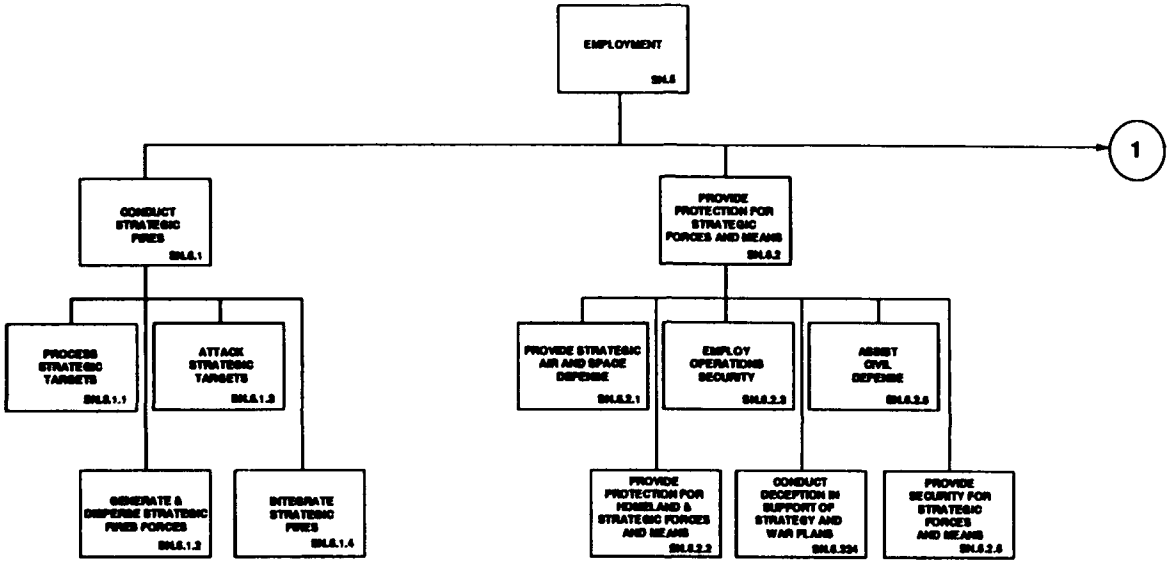

Figure 16. Employment operating system.

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PART 1: NATIONAL MILITARY

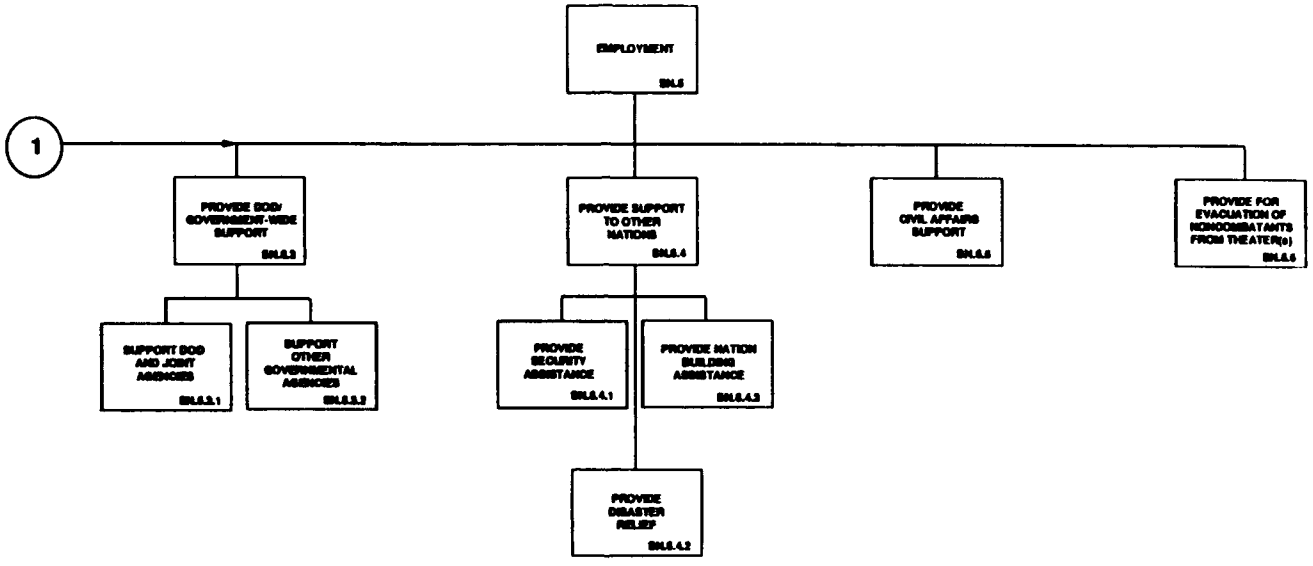

Figure 16. Employment operating system (continued).

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PART 1: NATIONAL MILITARY

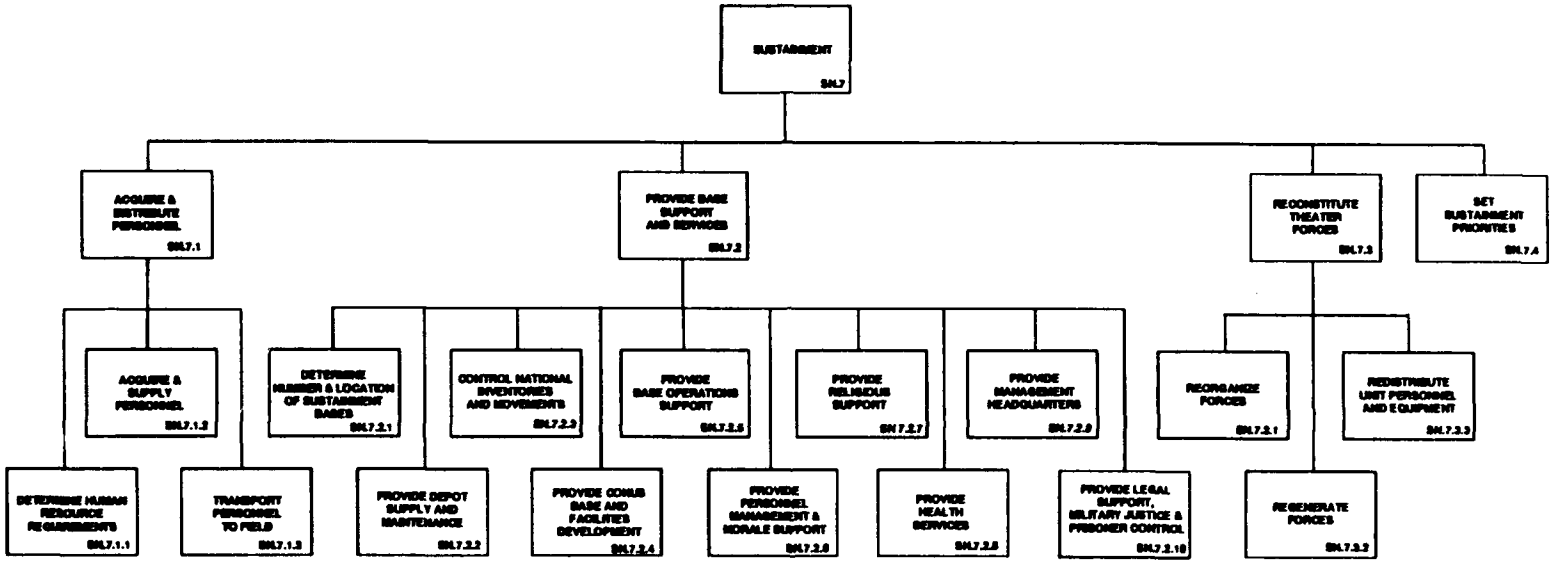


Figure 17. Sustainment operating system.

through to the theater base to include logistics support of maintenance systems, facilities (Army production base, national industrial base, military construction), supply, and troop service support. Related functions found under the Mobilization operating system pertain to expanding the base under mobilization conditions whereas the sustainment functions pertain to whether or not the nation has mobilized to achieve its objectives. Some sustainment national military functions can and are performed in the theater and the inter-theater COMMZ.

This operating system includes the functions to provide forces and resources to the combatant commands and the sustaining base and thus permits continuous theater operations. These functions include wholesale logistics and services support, including acquisition of materiel, facilities and services support (including personnel management, morale support, and health services)

Part 2: Theater Strategic Operating Systems

Part 2 of the Strategic Level Blueprint describes eight operating systems. The functions and subfunctions cover activities performed within a theater by unified, joint, or combined forces. Figure 18 shows the eight operating systems that form the uppermost structure for Part 2 of the Strategic Level Blueprint.

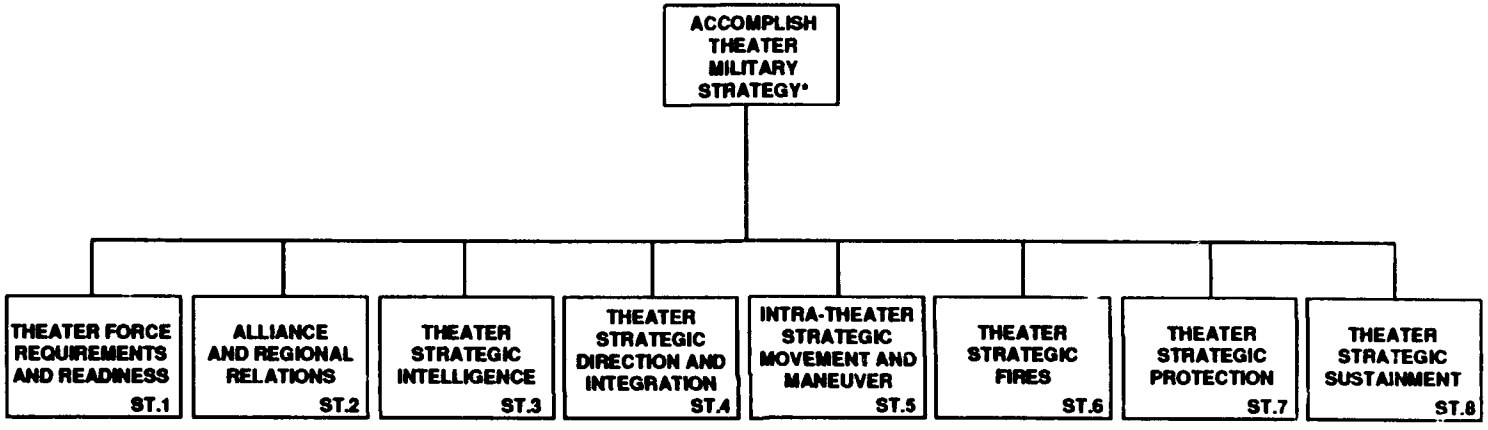
The following paragraphs contain descriptions and discussions of each of the eight theater strategic operating systems and a graphical representation of the subfunction structure of each. Appendix A, Part 2, contains the definitions of these eight operating systems and subfunctions.

Theater force requirements and readiness. The Theater Force Requirements and Readiness operating system establishes needs for the timely allocation of resources to accomplish approved theater military objectives, missions, or tasks. Figure 19 graphically shows the functions of Theater Force Requirements and Readiness. The functions and definitions are at Appendix A.

This operating system includes identifying warfighting needs (e.g., size, force structure, combat developments) and concepts requirements and also includes recommending solutions and concepts. Theater Force Requirements and Readiness also includes assessing the ability of assigned forces to perform their designed missions in executing theater strategy and campaigns.

Alliance and regional relations. Alliance and Regional Relations are those political-military activities conducted in a theater by the combatant commander either within existing alliances or in development of new, improved, or status quo

BLUEPRINT FOR THE STRATEGIC LEVEL OF WAR
PART 2: THEATER



LEGEND: STRATEGIC LEVEL BLUEPRINT

SN - NATIONAL MILITARY STRATEGIC
ST - THEATER STRATEGIC
*** - INCLUDES COALITIONS**

Figure 18. Eight theater strategic level of war operating systems.

STRATEGIC LEVEL BLUEPRINT
PART 2: THEATER

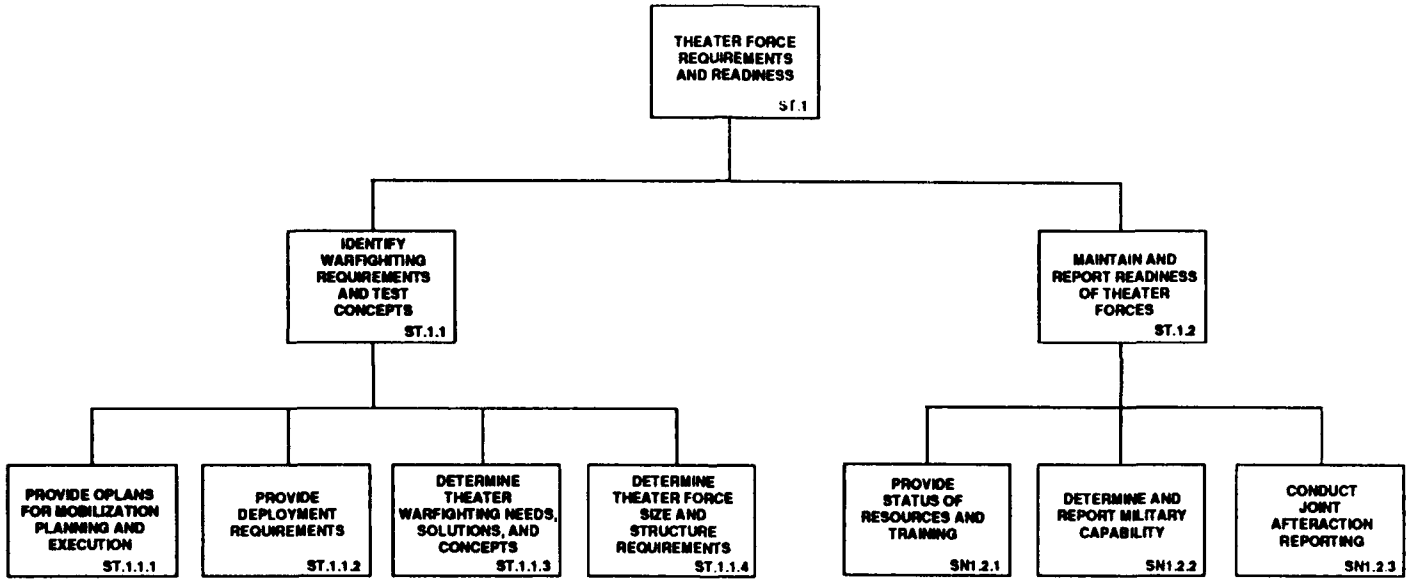


Figure 19. Theater Force Requirements and Readiness operating system.

relations with countries not in an alliance with the United States. Figure 20 shows the functions of the Alliance and Regional Relations operating system; definitions are at Appendix A.

This operating system includes activities to enhance relations throughout the theater, enhance the security of theater forces, and facilitate the national military and theater strategies in the process. This operating system also includes providing support to other countries in the form of security assistance, civil affairs, humanitarian assistance and disaster relief, nation building and the integration of these activities with other agencies providing related support. Key to these functions is the country team concept. These functions are frequently identified with peacetime competition but they persist throughout the operational continuum. It also includes support for U.S. forces, e.g., stationing of forces and assistance in protecting U.S. interests against nonmilitary threats.

Theater strategic intelligence. The Theater Strategic Intelligence system pertains to collecting and analyzing strategic information which will lead to the identification and location of enemy strategic center(s) of gravity and high payoff targets which, if attacked will achieve national or theater strategic objectives. Figure 21 shows the functions of Theater Strategic Intelligence, and the definitions are at Appendix A.

Theater Strategic Intelligence includes planning and directing theater intelligence activities, setting priorities and allocating intelligence resources for the collection of information on the theater situation and on strategic targets. It includes converting strategic information into intelligence and integrating that intelligence theater-wide. Functions include identifying friendly and enemy vulnerabilities, providing early warning, and disseminating theater strategic intelligence.

Theater strategic direction and integration. Theater Strategic Direction and Integration is the guidance expressed through theater strategy, derived from national security strategy and national military strategy, relative to the attainment of strategic objectives. These three strategies (and related strategic and contingency plans) integrate the national and military ends, ways and means. Figure 22 graphically shows the functions of Theater Strategic Direction and Integration, and definitions are at Appendix A.

The Theater Strategic Direction and Integration operating system pertains to acquiring and communicating strategic information and monitoring the worldwide and theater situations. It includes reassessing the theater strategic environment through participation in the CJCS' reassessment of the national and alliance strategy and international security considerations. It includes making the fundamental decision on whether actions are required. This process results in a determination of revised

STRATEGIC LEVEL BLUEPRINT
PART 2: THEATER

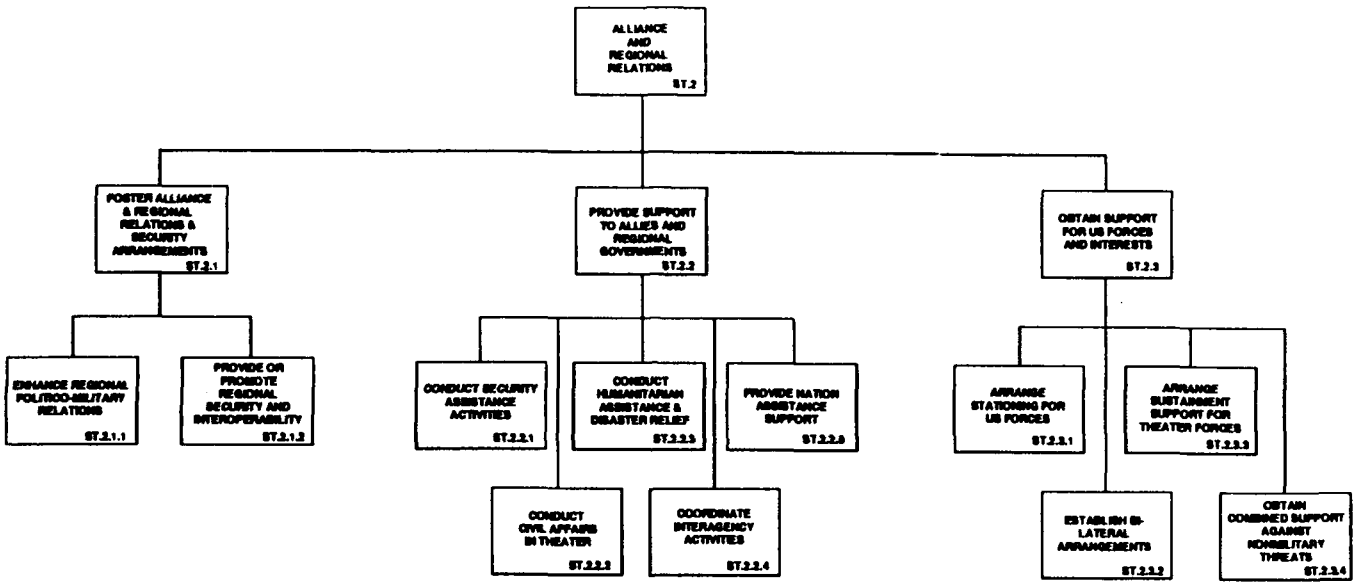


Figure 20. Alliance and Regional Relations operating system.

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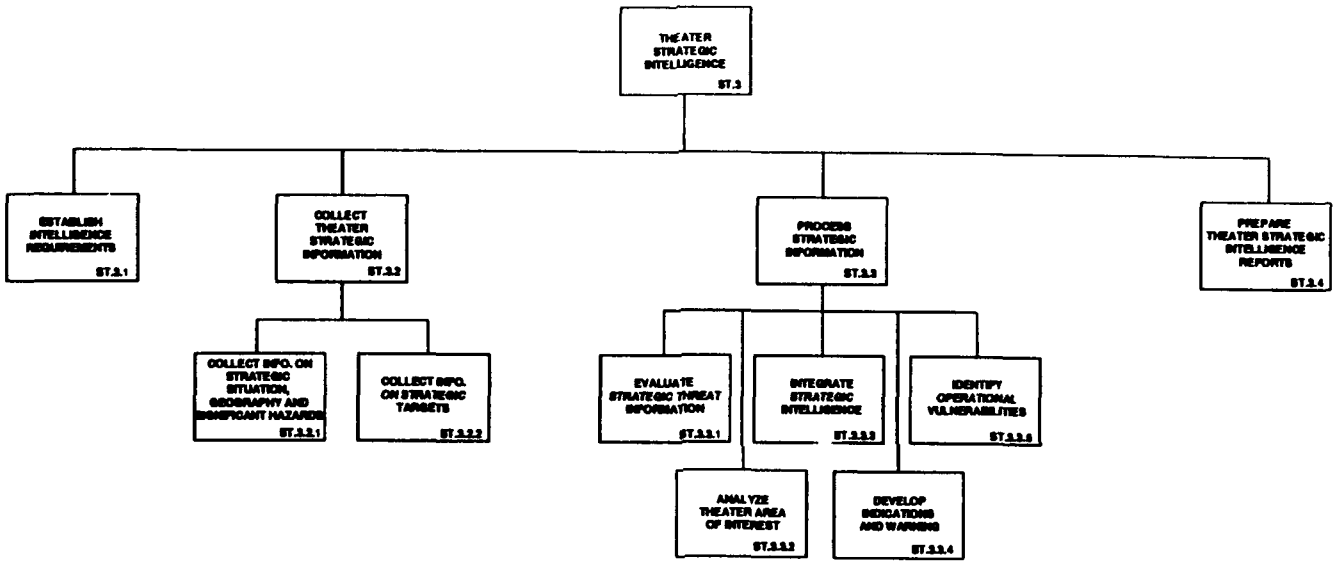
PART 2: THEATER



NOTE: For disseminating theater strategic intelligence, see Function ST.4.1.1 Communicate Strategic and Operational Information.

Figure 21. *Theater Strategic Intelligence operating system.*

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PART 2: THEATER

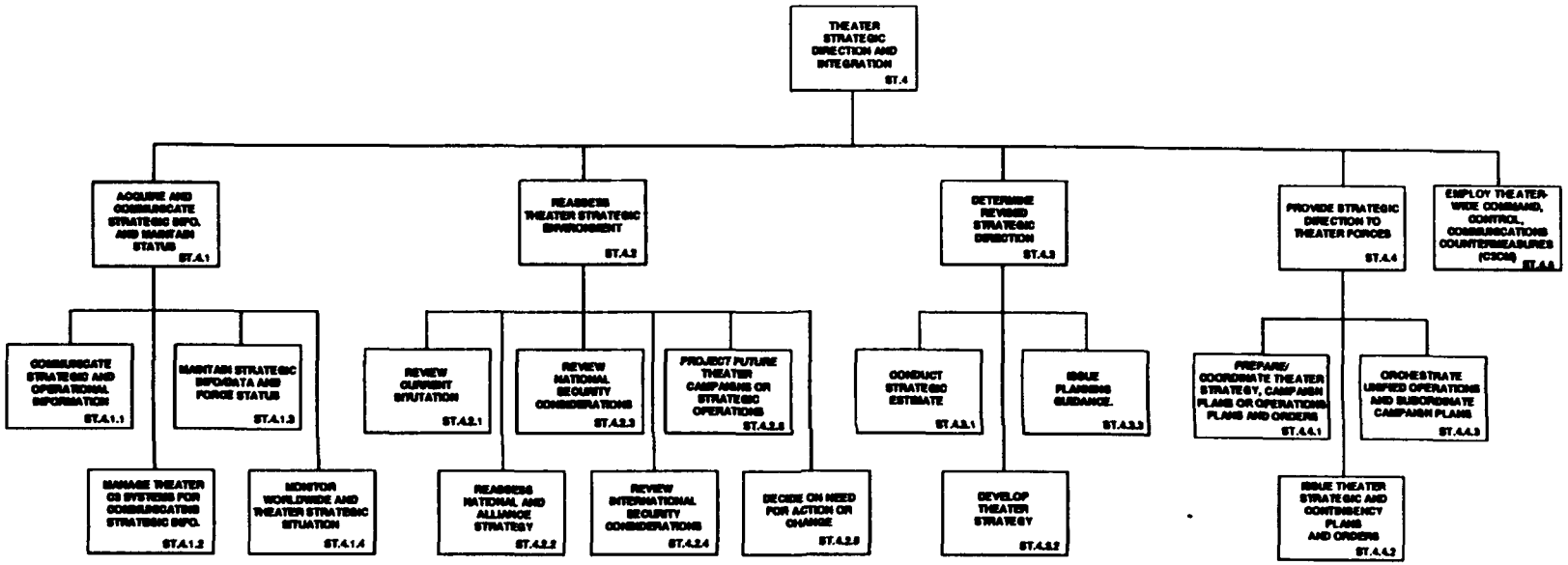

Figure 22. Theater Strategic Direction and Integration operating system.

strategic direction and the preparation and issuance of theater strategic plans and orders. It include synchronizing theater operations.

Intra-theater strategic movement and maneuver. Intra-Theater Strategic Movement and Maneuver is the disposition of assigned and apportioned U.S. forces, as well as forces of other friendly nations, within a theater to create a relative strategic advantage of position for the execution of the theater strategy for achieving national and alliance policy and objectives. This operating system pertains to movement of unified, joint or combined forces from within the theater either between different theaters (or areas) of operation or from within the theater into a theater of war or theater (or area) of operation elsewhere in the theater. Figure 23 shows the functions of Intra-Theater Movement and Maneuver. Appendix A gives the functions with their definitions.

This operating system includes functions for movement or deployment/redeployment throughout the theater by any means or mode. It includes conducting theater strategic maneuver and the associated subfunction of posturing unified, joint, or combined forces for strategically concentrating those forces to achieve strategic advantage over the enemy. Functions include facilitating the movement of forces in the theater campaign and also degrading the enemy's ability to concentrate thus achieving strategic advantage. A related function is controlling strategically significant area(s).

Theater strategic fires. Theater Strategic Fires is the application of firepower to achieve a decisive impact in the conduct of theater strategy, campaigns, and unified operations. Figure 24 shows the functions of Theater Strategic Fires. The Theater Strategic Fires operating system with functions and definitions is at Appendix A.

This operating system includes the functions for selecting and assigning strategic targets and making available the forces and resources for attacking those targets in accordance with the theater strategy and campaign plan. It includes the conduct of lethal and nonlethal attack of strategic targets. Targets are exclusive of air defense, or defensive counter-air, targets which are the object of Theater Strategic Air Defense in the Theater Strategic Protection operating system. Included in Theater Strategic Fires is the integration of theater strategic fires with national military strategic fires and operational fires.

Theater strategic protection. Theater Strategic Protection is the conservation of the fighting potential of a unified force so that it can be applied strategically at the decisive time and place. It pertains to making strategic formations, soldiers, and systems difficult to locate, strike and destroy. Figure 25 graphically shows the functions of Theater Strategic Protection. The definitions are at Appendix A.

STRATEGIC LEVEL BLUEPRINT
PART 2: THEATER

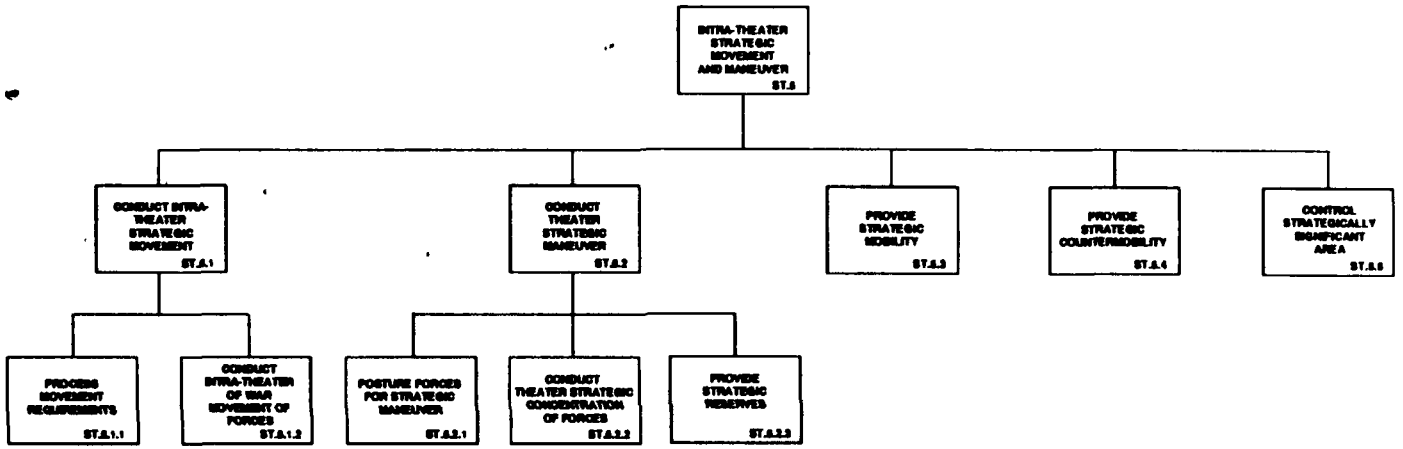

Figure 23. Intra-Theater Strategic Movement and Maneuver operating system.

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PART 2: THEATER

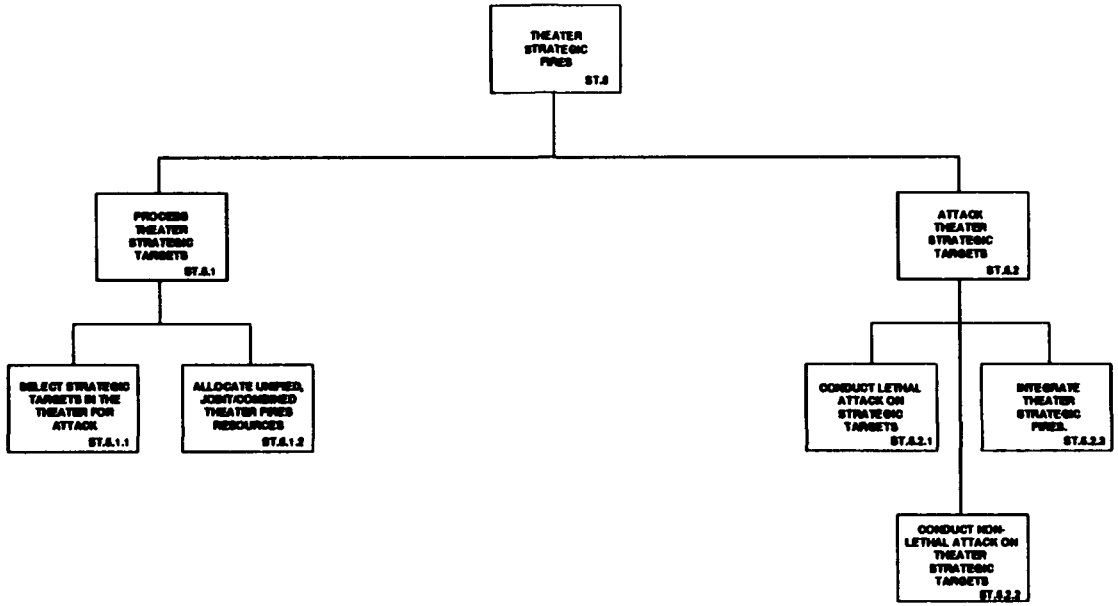

Figure 24. Theater Strategic Fires operating system.

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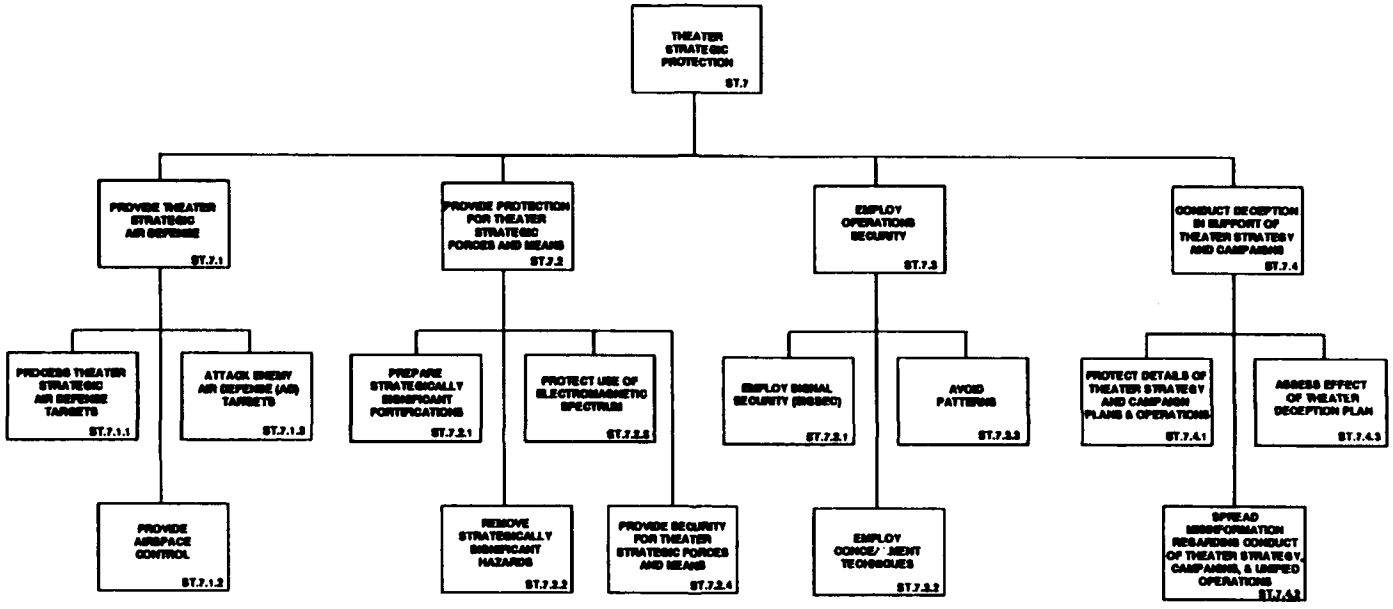


Figure 25. Theater Strategic Protection operating system.

This operating system includes protection of theater strategic formations from aerospace attack to include selecting targets, allocating resources, and attacking the targets. It provides for protecting friendly forces and their centers of gravity (e.g., fortifications, use of electromagnetic spectrum) and includes deception in support of theater strategy and campaigns and operations security and reduction of friendly vulnerability to hostile acts.

There are several functions associated with protecting the force that are included under other operating systems such as soldier health and welfare (included under sustainment), dispersion and mobility activities (theater strategic movement and maneuver), offensive counter-air (theater fires), etc.

Theater strategic sustainment. Theater Strategic Sustainment is the logistical and other support activities required to sustain the force in the execution of theater strategy, theater campaigns, and unified operations. Theater strategic sustainment links national military sustainment from CONUS to operational support and tactical CSS. It includes sustaining the tempo and continuity of operations throughout a theater in theater campaigns or unified operations. It is broad in scope and includes the whole theater including the theater base and that portion of the Intra-theater COMMZ in the theater. However, COMMZ support delegated to an operational commander (e.g., COMMZ activities located in a theater (or area) of operations) is referred to in the Operational Level of War Blueprint. Figure 26 shows the functions of Theater Strategic Sustainment; definitions are at Appendix A.

Functions include arming, fueling, and fixing/maintaining the force in a theater campaign or for routine theater-wide support; applicable to these three functions, and to manning the force, is the distribution function. Distribute is the theater function for maintaining the timely flow of stocks and services to theater forces using joint or combined transportation in support of theater strategy and campaigns. This includes the distribution and disposition in depth of theater war reserve stocks.

It includes building and maintaining principal and supplementary bases of support. Also included are associated sustainment engineering functions for constructing and maintaining facilities and communications networks (e.g., forward staging bases, rear area restoration, LOC sustainment), etc.

Sustainment can be provided by US forces; however, the preferred way is through a combination of host nation, contractor, and US civilian resources. Sustainment support from sources other than US Service organizations is analyzed under the Alliance and Regional Relations operating system.

STRATEGIC LEVEL BLUEPRINT
PART 2: THEATER

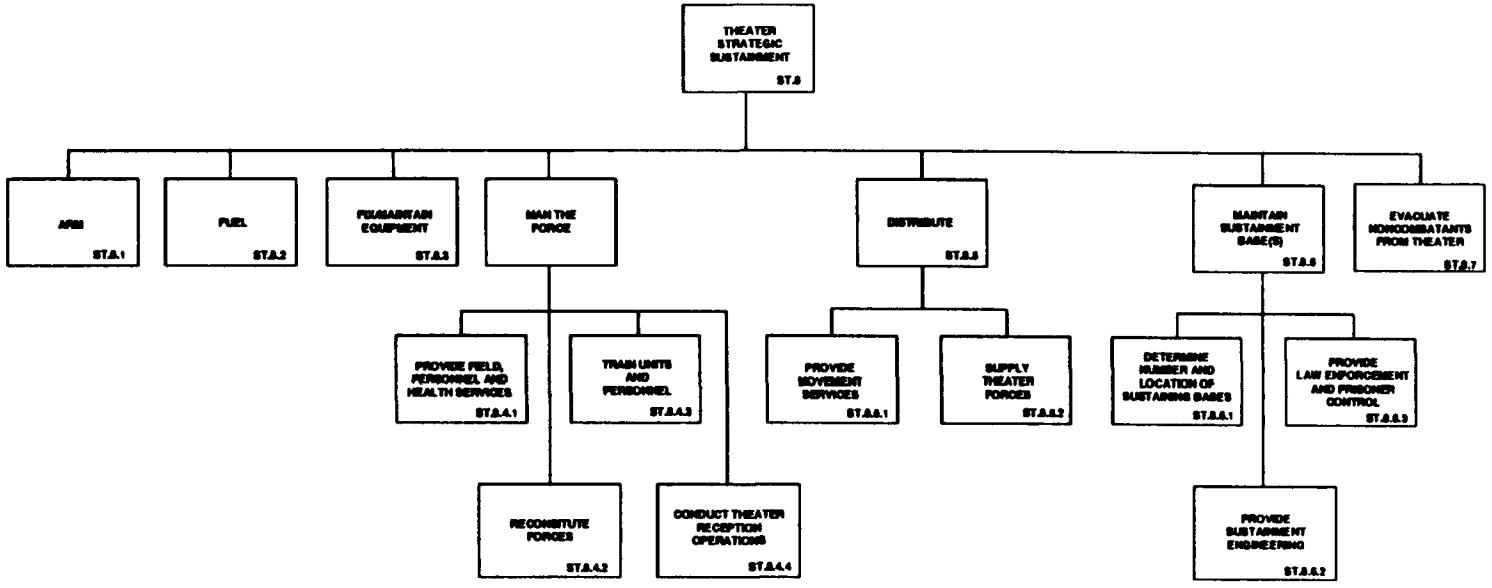


Figure 26. Theater Strategic Sustainment operating system.

Discussion of Blueprint for the Operational Level of War

Purpose

The purpose of this section is to provide a general description of the hierarchical structure of the Blueprint at the Operational Level of War. The section describes operating systems in general and each of the six operating systems for the Operational Blueprint specifically.

Operating Systems

The Operational Blueprint is organized by six operating systems. Operational Blueprint operating systems are defined as the major functions performed by joint and combined operational forces for successfully executing subordinate campaigns and major operations in a theater or area of operations. The subfunctions are intended to be sufficiently comprehensive in order to cover functions performed by joint and combined forces (air, space, land, and sea). However, there is an emphasis on Army operational level functions. "Forces" refers to all types of forces including special operating forces. Figure 27 shows the six operational level of war operating systems that form the uppermost level of the Operational Blueprint. For a more complet discussion of the Blueprint and operating systems as a hierarchical structure, see Section 2 of this document.

The following paragraphs contain descriptions and discussions of each of the six Operational Blueprint operating systems and a graphical representation of the subfunction structure of each. A short title is used for each operating system, e.g., Operational Movement and Maneuver refers to Operational Level of War Movement and Maneuver Operating System. Appendix C contains the definitions of the operating systems functions and subfunctions.

Operational movement and maneuver. Operational Movement and Maneuver operating system is the disposition of forces to create a decisive impact on the conduct of a campaign or major operation by either securing the operational advantages of position before battle is joined or exploiting tactical success to achieve operational or strategic results. Operational Movement and Maneuver also includes those functions pertaining to facilitating movement of major Army formations in subordinate campaigns or major operations without delays. It also includes delaying, channeling or stopping movement by enemy operational formations, and controlling terrain, sea and air for positional advantage. Movement and maneuver can be on sea, land, or through the air. Figure 28 shows the functions of Operational Movement and Maneuver. The Operational Movement and Maneuver operating system with functions and definitions is at Appendix B.

Operational Movement and Maneuver pertains to the movement of all operational forces (i.e., air, land and naval forces) in

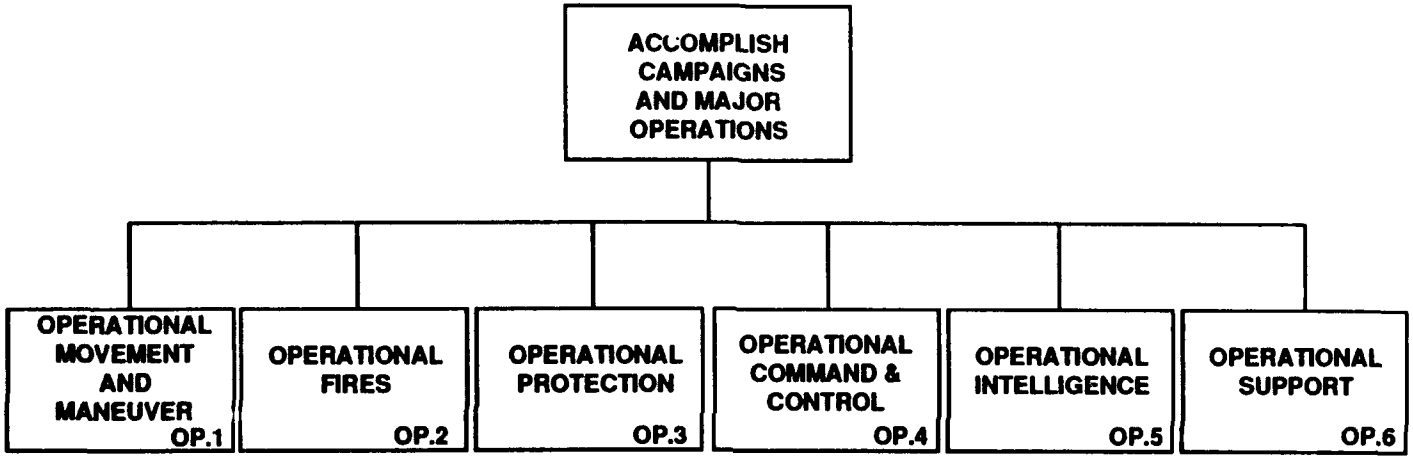


Figure 27. Six operational level of war operating systems.

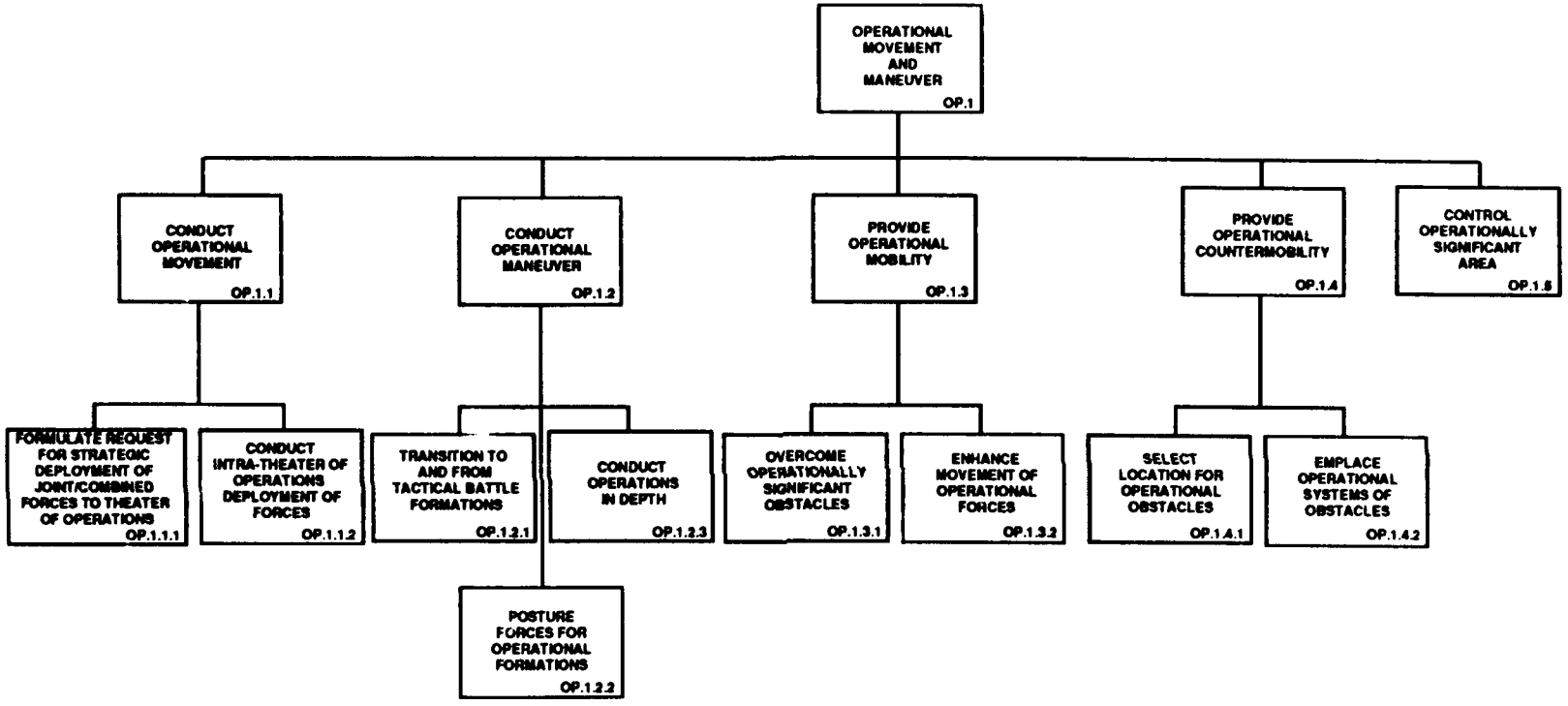


Figure 28. Operational Movement and Maneuver operating system.

joint and combined operations for the purpose of achieving the strategic aim and/or operational military objectives of the operational commander's campaign or major operation. It is the disposition of forces before, during, or after battle for achieving operational results. Although Operational Movement and Maneuver is frequently associated with large formations, scale alone does not make movement of forces, large or small, operational. The movement or maneuver is by any mode or means.

Operational Movement is the function of deployment or regroupment of forces. It provides the operational commander's function of requesting the strategic deployment of forces to the theater (or area) of operations from outside his AOR. The operational commander specifies the timing, sequencing and desired port of debarkation (e.g., time phased force deployment list) that support his plan and intent. It provides for the shifting of forces within the theater (or area) of operations for operational objectives. Conduct of Operational Maneuver refers to the deployment of joint and combined operational forces to and from battle formations, regroupment of forces, and the extensior of those forces to operational depths through offensive or defensive operations for achieving positional advantage over enemy operational forces to achieve operational or strategic objectives.

Operational Movement and Maneuver includes the functions of providing mobility for operational forces and countering the mobility of enemy operational forces. Facilitating movement of major formations without delays includes counteracting the effects of operationally significant obstacles. It also includes enhancing operational movement by preparing and improving facilities and routes critical to campaigns and major operations. Operational countermobility pertains to delaying or otherwise hindering the movement of enemy operational formations to include selecting and emplacing systems of obstacles for operational effect.

This operational operating system also provides for controlling land, sea, and aerospace areas which would give an occupier of the area an operational or strategic advantage over his opponent. Also, movement and maneuver are keyed to positioning joint and combined forces for the defeat of the enemy's center(s) of gravity or high-payoff targets which would lead to the defeat of center(s) of gravity. The movement of forces is from their base(s) of operations to their point of concentration. Once deployed to battle formations, movement becomes tactical and is described by functions of the Tactical Blueprint (see the next Section and Appendix C of this pamphlet).

Operational fires. Operational Fires is the application of firepower to achieve a decisive impact on the conduct of a subordinate campaign or major operation. Operational fires are by their nature joint/combined activities or functions. They are a separate component of the operational scheme with operational

movement and maneuver, but maneuver and fires must be integrated. Operational fires are not fire support, and operational maneuver is not necessarily dependent on such fires. However, operational maneuver can be affected by operational fires. Today, operational fires are normally furnished by assets other than those required for the routine support of tactical maneuver; but as the range of those assets now used to support tactical maneuver increases, those same assets will play a more significant role in the delivery of operational fires. Figure 29 shows the functions of the Operational Fires operating system. The Operational Fires operating system with functions and definitions is at Appendix B.

Operational fires include processing land, air (less air defense or defensive air targets) and sea targets whose attack will have a major impact on a campaign or major operation.It includes the allocation of joint and combined air, land, sea (surface and subsurface) and space means. Currently, operational fires are provided largely by theater air forces; but the increasing capabilities of surface delivery systems (land and sea) promise greater use of such systems in an operational role in the future. In a nuclear war, fires could become the predominant operational instrument. This operating system also includes integrating operational fires, lethal and nonlethal.

Fires at the operational level are designed to achieve a single operationally significant objective. They have major and possibly decisive implications for campaigns or major operations. Finally, they are planned and synchronized at the operational level of command.

The planning of operational fires differs from the tactical approach to fire support planning. The latter is "bottom up" (fire plans initiated at the lowest level and cumulated and reconciled at each successive higher level); whereas operational fires are planned "top down" (objectives are established and targets designated and integrated by the operational commander, then passed to subordinate joint or allied units for execution).

Operational Fires focus largely on one or more of the following:

- Facilitation of maneuver to operational depths by creating an exploitable gap in the tactical defense (e.g., the carpet bombing that preceded the breakout of American forces from the Normandy beachhead in WW II);

- Isolation of the battlefield by the interdiction of uncommitted enemy forces and sustaining support (e.g., isolation of the Normandy battlefield in 1944); and

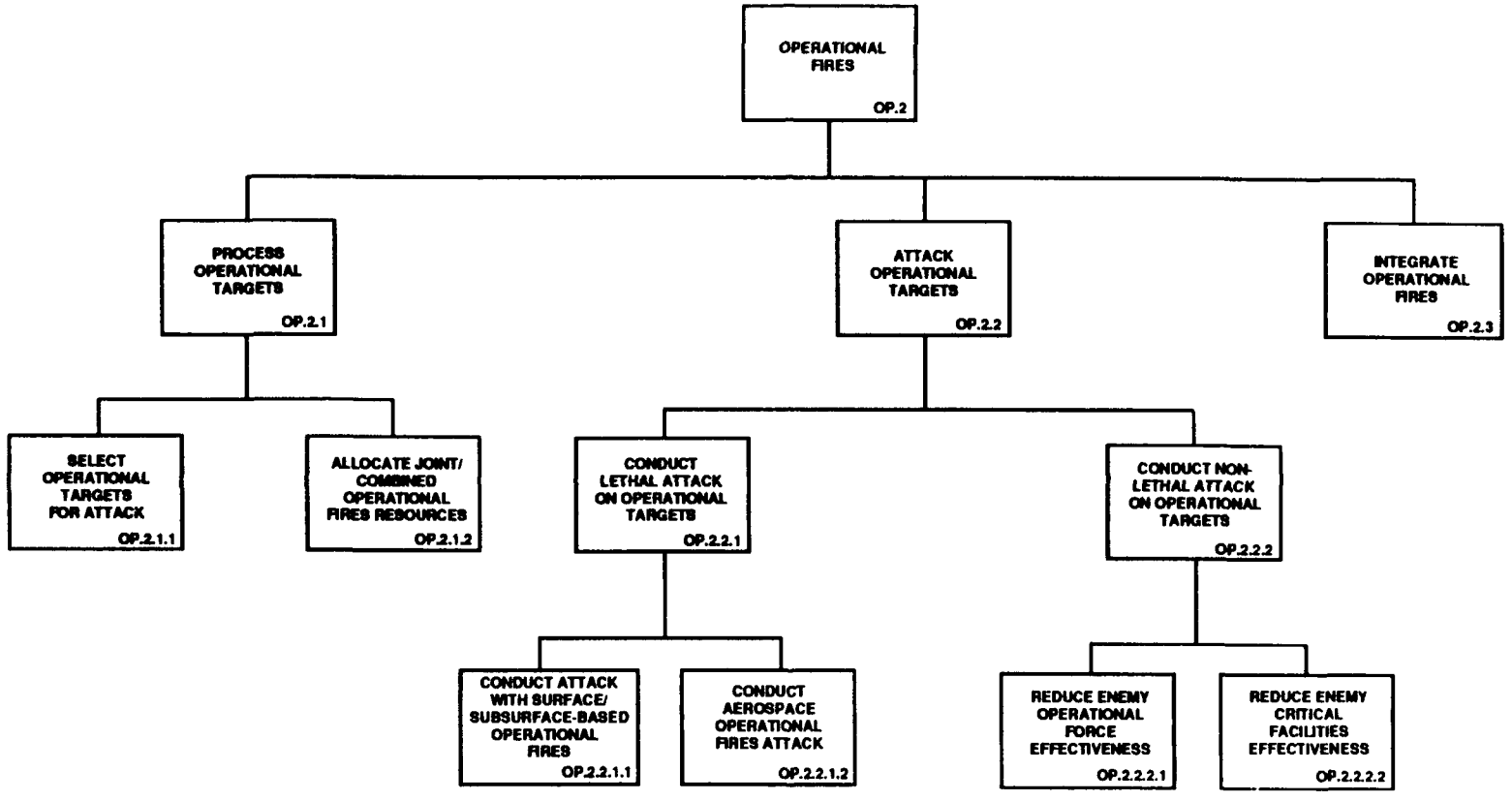


Figure 29. Operational Fires operating system.

Destruction of critical functions and facilities having operational significance (e.g., attain air superiority by destroying enemy capability).

Operational protection. Operational Protection operating system is the conservation of the fighting potential of a force so that it can be applied at the decisive time and place. It includes actions taken to counter the enemy's firepower and maneuver by making soldiers, systems, and operational formations difficult to locate, strike, and destroy.

Operational protection includes protecting the force from enemy operational maneuver and concentrated enemy air, ground, and sea attack and natural occurrences. Figure 30 shows the functions of the Operational Protection operating system. The Operational Protection operating system is at Appendix B.

Note: Some subfunctions associated with the protection or survivability of the force are included under other related operational operating systems. Survivability and protection functions regarding soldier health and welfare are covered in the operational support function OP.6.4.2 Provide Field, Personnel, and Health Services. Dispersion and mobility actions are covered in operational movement functions OP.1.2 Conduct Operational Maneuver and OP.1.3 Provide Operational Mobility. Offensive counter-air activities are included under operational fires.

Operational Protection includes providing operational air defense, safeguarding operational forces in subordinate campaigns/major operations, employing operations security (OPSEC), conducting deception, and providing security, all for operational effect. This operating system pertains to forces in the COMMZ in a theater of operations as well as those moving to a campaign or major operation.

Operational Air Defense involves the protection of operational forces from air attack (including attack from or through space) through both direct defense and destruction of the enemy's air attack capacity in the air. It includes such measures as use of aircraft (includes helicopters), interceptor missiles, air defense artillery, non-air defense weapons in an air defense role, and electronic countermeasures and counter-countermeasures.

At the operational level of war, air defense concerns protecting critical points and facilities (e.g., ports, key bridges, operational command and control facilities) in the COMMZ, support forces in the COMMZ, and forces transiting the COMMZ, or critical facilities in the combat zone with operational significance. It also includes the protection of operational force formations in moving to a major operation or subordinate campaign to the point of concentration for deployment to battle (tactical) formation and during operational maneuver.

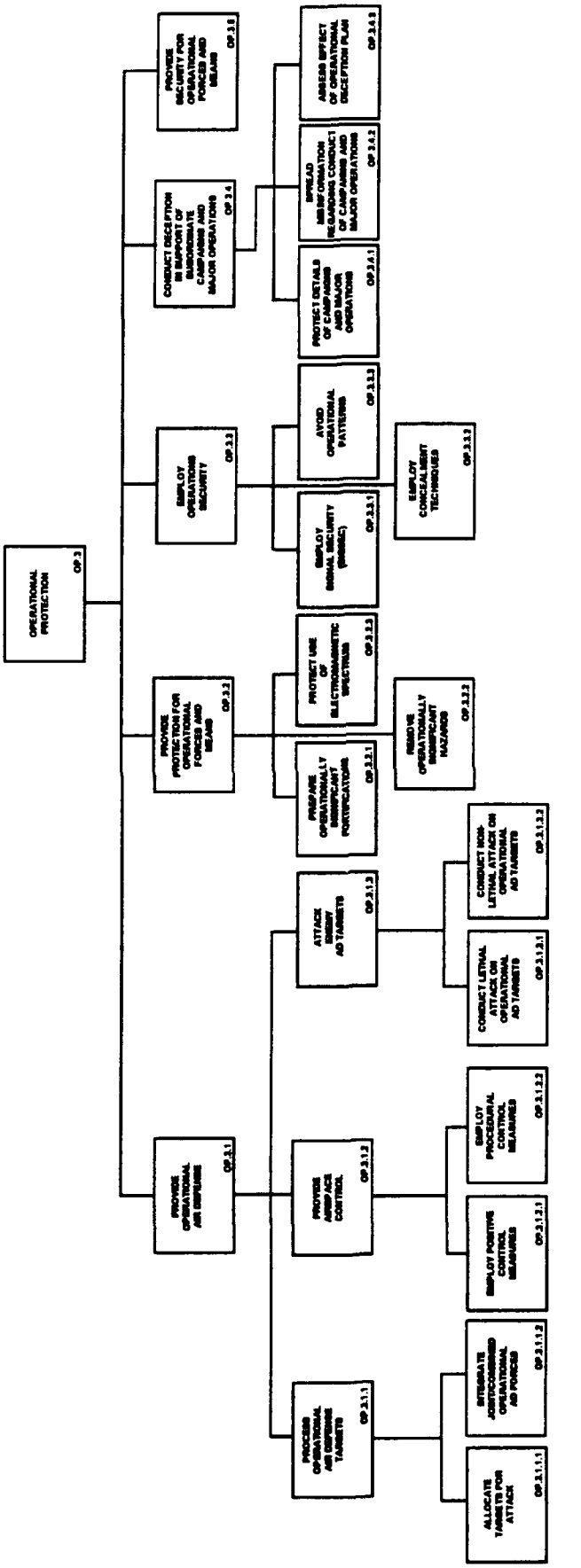


Figure 30. Operational Protection operating system.

Operational air defense is always joint and can be a combined activity. Army operational air defense is under the theater air defense command (ADCOM), a TA functional command; the ADCOM will be under the operational control of the air component commander for joint theater counterair operations.

The conduct of deception, an activity that makes a major contribution to the protection and survivability of operational forces, therefore is included under the Operational Protection operating system. Operational deception includes protecting the commander's own intentions, disseminating misinformation to deceive the enemy about those intentions, and determining the effect of the deception.

Operational command and control. Operational Command and Control (C2) operating system is the exercise of authority and direction by a properly designated commander over assigned operational forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. Figure 31 shows the functions of Operational Command and Control. The Operational Command and Control operating system with functions and definitions is at Appendix B.

In some literature, reference is made to C3I and in others C2. As is done in the Army's C2 System Operational Concept, the use of C2 subsumes communications. Intelligence is retained as a separate function (See OP.5 Operational Intelligence in Appendix B); therefore, C3I is not used except for convenience when discussing C3I type targets.

At the operational level of war, command and control is frequently a joint activity, and very often a combined activity. Sometimes it is uniservice. The assignment of missions, areas of responsibility, and resources plus the establishment of command relationships are critical elements of the operational commander's command and control system. Planning for campaigns generally follows the normal decision-making process for commander and staff actions, e.g., that found at the tactical level. However, campaign plans are normally of such scope in time and space that a deliberate planning process is followed.

When the operational commander is assigned a mission by the theater, or theater of war, commander (CINC) for a campaign or major operation, he initiates planning. He assigns planning tasks, considers the strategic aim, constraints, restrictions imposed on the CINC, and total joint and combined resources made available to him. When formulation of the operational commander's supporting campaign plan is complete, the next higher commander reviews the plan. Supporting air, land, and naval plans for the theater of operations subordinate campaign are developed simultaneously.

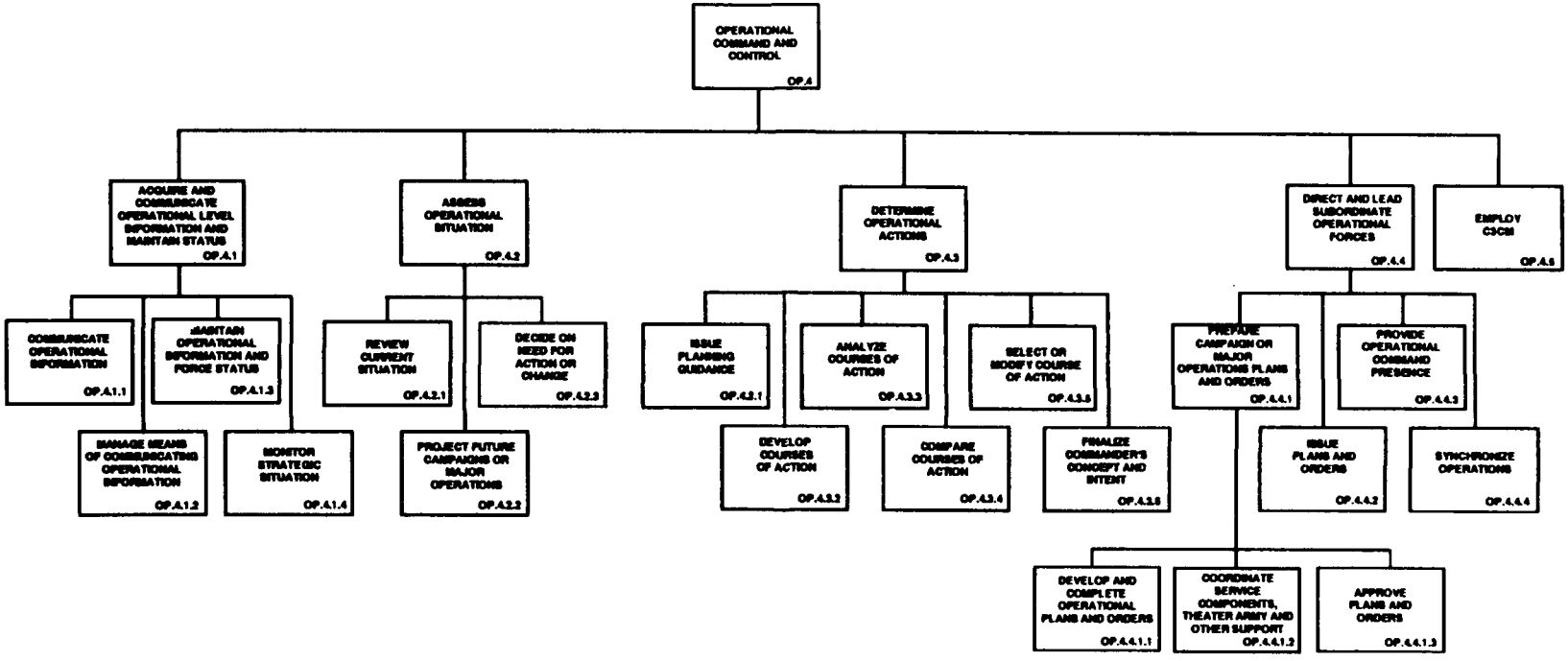


Figure 31. Operational Command and Control operating system.

There are occasions when major operations, especially in response to enemy actions, preclude long and deliberate planning by an operational commander, e.g., Patton's 3d Army Ardennes operation to counter Germany's counteroffensive in WW II (short planning and fragmentary orders characterized the Allied effort). As a theater of operations matures and the span of control grows, it may be necessary to establish an operational headquarters between the corps and the theater of operations and to reorganize the theater. That headquarters is an army group which is organized for planning and directing major operations of the campaign, but it has no sustainment function or assets.

Operational level command and control includes various size forces. It includes control of operational forces during operational movement and operational maneuver throughout the depth and space of the theater or area of operations to ensure a coordinated, synchronized, mutually supported effort. In large, mature theater of operations (e.g., AFCENT) large joint and combined forces exist at several echelons of command within the operational level of war. It includes C2 of major formations in a campaign or major operation in a theater of operations, support forces throughout the communications zone (COMMZ), and forces transiting the COMMZ. In a smaller or undeveloped theater, operational command could be over much smaller formations (e.g., Grenada). At whatever level of command they exist, operational forces are linked by command and control to the strategic level and to the tactical level. In the end, the operational level relates to the strategic aim and not size, echelon, or type of formation.

Disruption of the enemy's coordination of his forces while protecting similar friendly capabilities is an essential part of command and control. This function is called "command, control, and communications countermeasures (C3CM) - the integrated use of operations security, military deception, jamming, and physical destruction, supported by intelligence, to deny information to, influence, degrade, or destroy adversary command, control, and communications (C3) capabilities and to protect friendly C3 against such actions. As an inherent C2 function, the employment of C3CM is included under the Operational C2. Closely associated with C3CM is Electronic Warfare (EW). EW provides much of the means for conducting C3CM; it is discussed in the Blueprint as part of C3CM.

There are two component functions of employing C3CM: 1) that division of C3CM comprising measures taken to deny adversary commanders the ability to command and control their forces effectively (also called "counter-C3", or in the Blueprint the function is titled "Deny Enemy Effective C3 of Own Forces"); and 2) that division of C3CM comprising measures taken to maintain the effectiveness of Friendly C3 despite both adversary and friendly counter-C3 actions (also called "C3-protection", or in the Blueprint the function is titled "Protect Friendly C3").

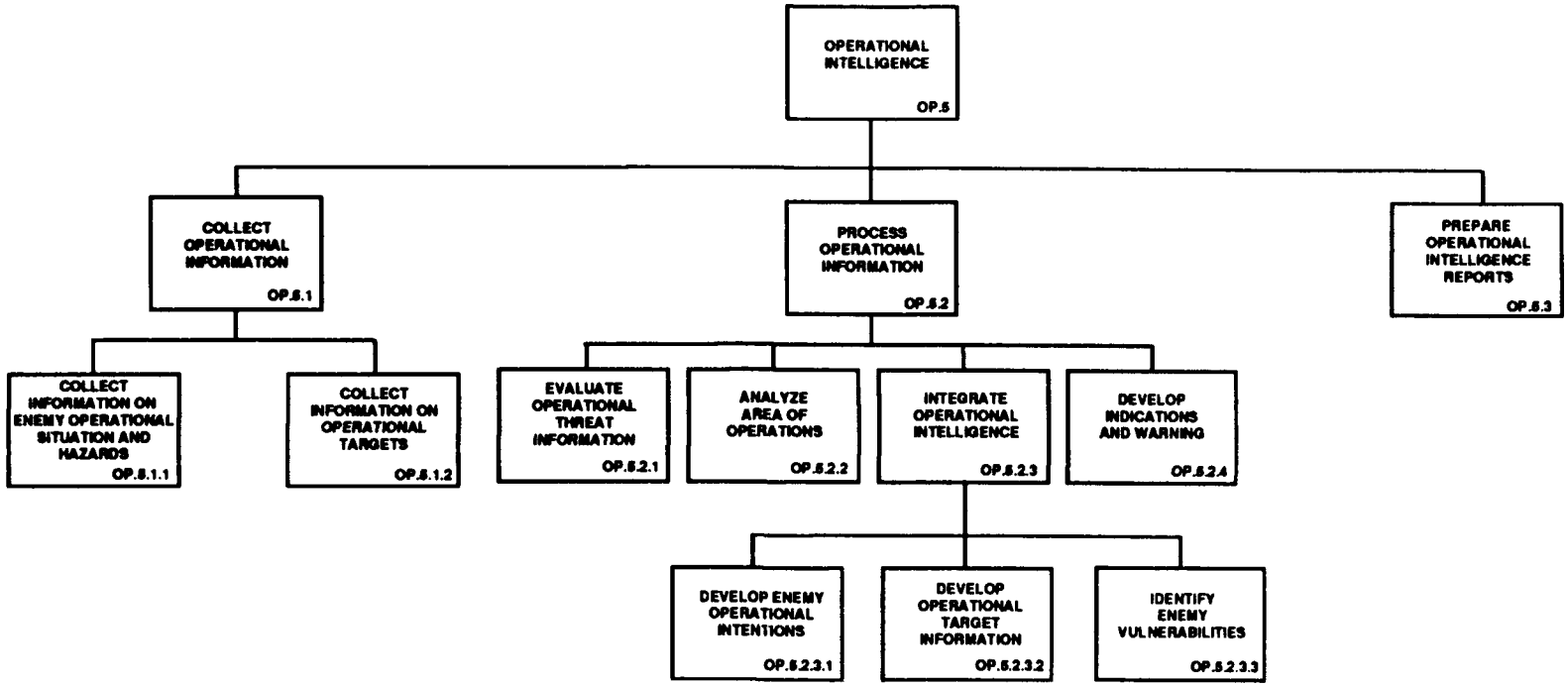
Because C3CM is an inherent function of command and control it is included under the Operational C2 operating system. However, because of the functional arrangement in the Operational Blueprint and the need to avoid redundancy, users are referred elsewhere in the Blueprint for analyzing the subfunctions of counter-C3 and C3-protection. For counter-C3 see functions for selecting targets and means of engagement (OP.2.1), deception (OP.3.4), and degrading or destroying enemy C3I (OP.2.2). For C3-protection see the functions for employing OPSEC (OP.3.3), using camouflage and other survivability measures (OP.3.2 and OP.3.3), conducting ECCM (OP.3.2.3), and minimizing the effect of friendly C3CM on friendly C3I (OP.4.4.4). For intelligence support of C3CM see the operating system, OP.5 Operational Intelligence.

Operational C2 includes: Acquiring and communicating operational information, maintaining that information, assessing the situation, determining actions, directing and leading operational forces, and employing C3CM.

Operational intelligence. Operational Intelligence operating system is that intelligence which is required for the planning and conduct of campaigns and major operations within a theater (or area) of operations. At the operational level of war, the joint and combined intelligence system concentrates on the collection, identification, location, and analysis of strategic and operational centers of gravity that if successfully attacked, will achieve the assigned strategic aim(s) and significant factors affecting operations (e.g., NBC hazards). Figure 32 shows the functions of the Operational Intelligence operating system. The Operational Intelligence operating system with functions and definitions is at Appendix B.

Intelligence at the operational level of war must probe the mind of the enemy commander. Many elements of tactical intelligence (e.g., enemy order of battle, doctrine, and characteristics of the area of operations) apply at the operational level, but they must be evaluated in a wider strategic context in an effort to understand how they will affect the enemy's decision-making process and thus the campaign or major operation. Therefore, operational intelligence must be broad. Political, economic, and technological factors could materially affect enemy decisions at the operational level. This type information requires access to information normally obtainable only from strategic collection means.

Since operational intelligence is predictive in nature, it contains elements of risk. It must see the campaign through the enemy commander's eyes and not be constrained by friendly preconceived notions. For accomplishing the above, operational intelligence includes: Collecting information on the operational situation and operational targets; processing operational information and converting it to intelligence; and preparing operational intelligence reports.



NOTE: For disseminating operational intelligence, see Function OP.4.1.1 Communicate Operational Information.

Figure 32. Operational Intelligence operating system.

The processing of operational intelligence is largely the development of the operational situation and development of operational targets. It includes: Evaluation and analysis of information; integration of the resulting intelligence to yield enemy vulnerabilities and commander's intentions, centers of gravity and high-payoff targets; development of indications and warning.

Operational support. Operational Support operating system consists of the logistical and support activities required to sustain the force in campaigns and major operations within a theater (or area) of operations. Operational support of the force extends from the theater of operations sustaining base or bases to the forward combat service support (CSS) units and facilities organic to major tactical formations. This theater of operations sustaining base (COMMZ), in performing its theater of operations support functions, links strategic sustainment to tactical CSS. This sustainment function is almost always a joint effort. It is often a combined effort. The Operational Support operating system with functions and definitions is at Appendix B.

Figure 33 shows the functions of the Operational Support operating system. The functions of Operational Support are arm, fuel, fix, man the force, and distribute stocks and services by using joint or combined transportation means.

Operational support differs from tactical CSS in that the planning and preparation period is normally longer and the supported operation normally is also longer. Support of the force at the operational level includes balancing current consumption in the theater of operations with the need to build up support for subsequent campaigns or major operations, lengthening lines of communications (LOCs), and staging of support forward as required to sustain the tempo of operations.

Quantities of supplies, equipment, and replacement personnel and their distribution must be sufficient to ensure continuity of operations through all phases of a campaign. It includes the provision of support during operational maneuver in conducting operations to operational depths including exploitation and pursuit. Otherwise, the campaign could reach its culminating point prematurely because of insufficient support before achieving all its operational or strategic objectives.

The size of the COMMZ for a theater varies based on a number of factors. These factors include the following: the size of the theater of operations, forces available for operations and sustainment, need for depth, proposed location of the sustainment base(s), number and direction of the lines of support, enemy's capability to interdict and disrupt sustainment operations, geography, and political boundaries. A multitude of functions are performed in the COMMZ by a diversified group of organizations. These include the operational sustainment functions of manning, arming, fueling, fixing, supplying and transporting the

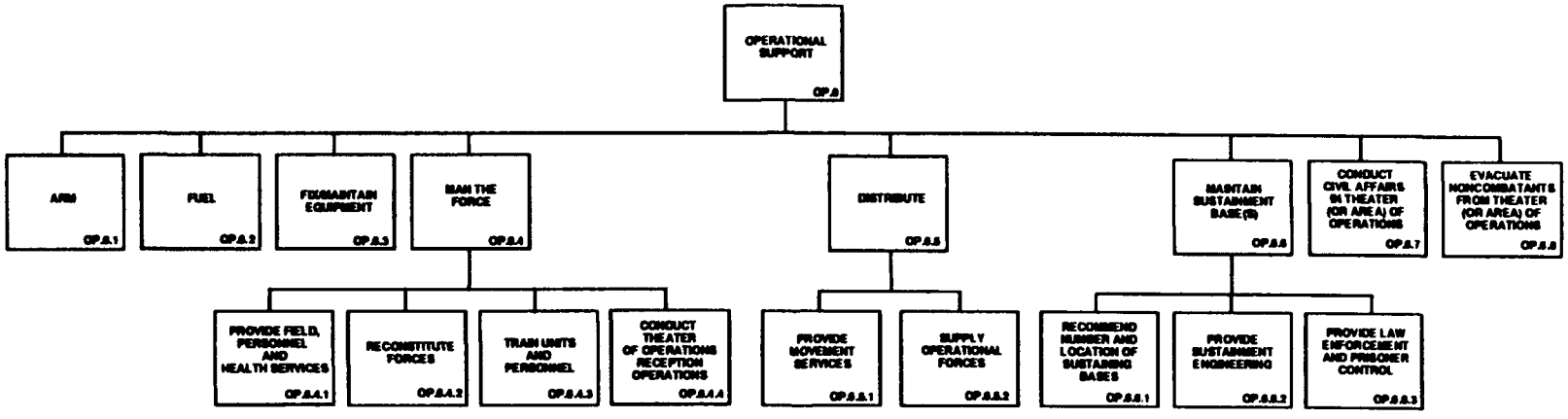


Figure 33. Operational Support operating system.

force and supplies. Other sustainment functions conducted by the theater army (TA) include reception, reconstitution, theater engineer support, civil affairs operations, and training.

Theater army is the army component normally responsible for supporting US Army forces in a theater of war. The COMMZ is always joint and may be a combined command, and the theater army commander may be designated the joint COMMZ commander. During support operations (in support of a campaign or major operation), the theater army commander must combine and synchronize the functions performed in support of the operation with those in support of the COMMZ or sustainment base to ensure that support is responsive to the priorities of operational level commanders (i.e., theater of operations, army group, joint task force, and corps commanders).

Discussion of Blueprint for the Tactical Level of War

Purpose

This section provides a general description of the hierarchical structure of the Blueprint at the Tactical Level of War (Short Title: Tactical Blueprint). The section describes the tactical level operating systems in general and provides a narrative description and graphical version of each of the seven operating systems for the Tactical Blueprint specifically.

Operating Systems

The Tactical Blueprint is organized by seven operating systems. At the tactical level of war, operating systems are called Battlefield Operating Systems (BOS). BOS are defined as the major functions occurring on the battlefield performed by the force to successfully execute operations (battles and engagements) by the Army to accomplish military objectives directed by the operational commander. Figure 5 shows the seven tactical level of war Battlefield Operating Systems that form the uppermost level of the Tactical Blueprint.

"Force" refers to Army combined arms forces to include combat, combat support, and combat service support. Although emphasis is on Army functions at the tactical level, the Army does not go to war alone; the Tactical Blueprint includes functions typically performed by other Services. As mentioned in Section 2, the BOS does not represent Army branches or proponents; any type organization, regardless of branch or echelon, relates to one or more of the seven BOS.

The following paragraphs contain descriptions and discussions of each of the seven BOS and a graphical representation of the subfunction structure of each. A short title is used for each BOS, e.g., Maneuver BOS refers to Tactical Level of War Maneuver Battlefield Operating System. Appendix C

gives the Tactical Blueprint and contains the definitions of the operating systems functions and subfunctions.

Maneuver

The Maneuver BOS is the employment of forces on the battlefield through movement and direct fires in combination with fire support, or fire potential, to achieve a position of advantage in respect to enemy ground forces in order to accomplish the mission. The Maneuver BOS includes direct fire systems (e.g., small arms, tank guns, and attack helicopter fires). It does not include indirect fires that are included under the Fire Support BOS.

The Maneuver BOS pertains to all forces. Support forces must move or maneuver on the battlefield in order to provide the support needed by maneuver units, e.g., infantry and armor. Artillery forces must maneuver to be in the correct position to provide fire support. Signal, engineer, air defense, and combat service support units must be able to move with combat formations deep, close, or in the rear areas in order to support the battle.

Figure 34 shows the Maneuver BOS that consists of three functions--Move, Engage the Enemy, and Control Terrain. Move includes the positioning and repositioning of forces (units and equipment) relative to the enemy to secure or retain positional advantage, making full use of terrain and formation. The positioning of forces may be on or under the surface; this permits the analysis of requirements and capabilities of units to move on the ground or on water. The structure also permits analysis of movement under water (e.g., special operations forces conducting SCUBA operations). It also permits the analysis of requirements and capabilities of units to move through the air by helicopter, parachute, or other means. The preparation for tactical movement and the deployment into tactical position are also represented. Other battlefield subfunctions of move are negotiate terrain and navigate. Appendix C provides the Maneuver BOS functions and their definitions.

The Engage Enemy function refers to entering into conflict or combat with the enemy using direct fire or close combat against ground targets. This is the lethal aspect of maneuver employing direct fire. Direct fires that are distinguished from close combat for analytical purposes include small arms, tanks, antitank guns and rockets, automatic weapons, directed energy weapons, and attack helicopter fires. Close combat refers to those other lethal means for fighting in close quarters; e.g., bayonets and other hand weapons.

Control Terrain is the third function of Maneuver. Often combat forces are required to deny terrain to the enemy (e.g., key terrain) by occupying that terrain physically or controlling its use through direct fire or fire potential.

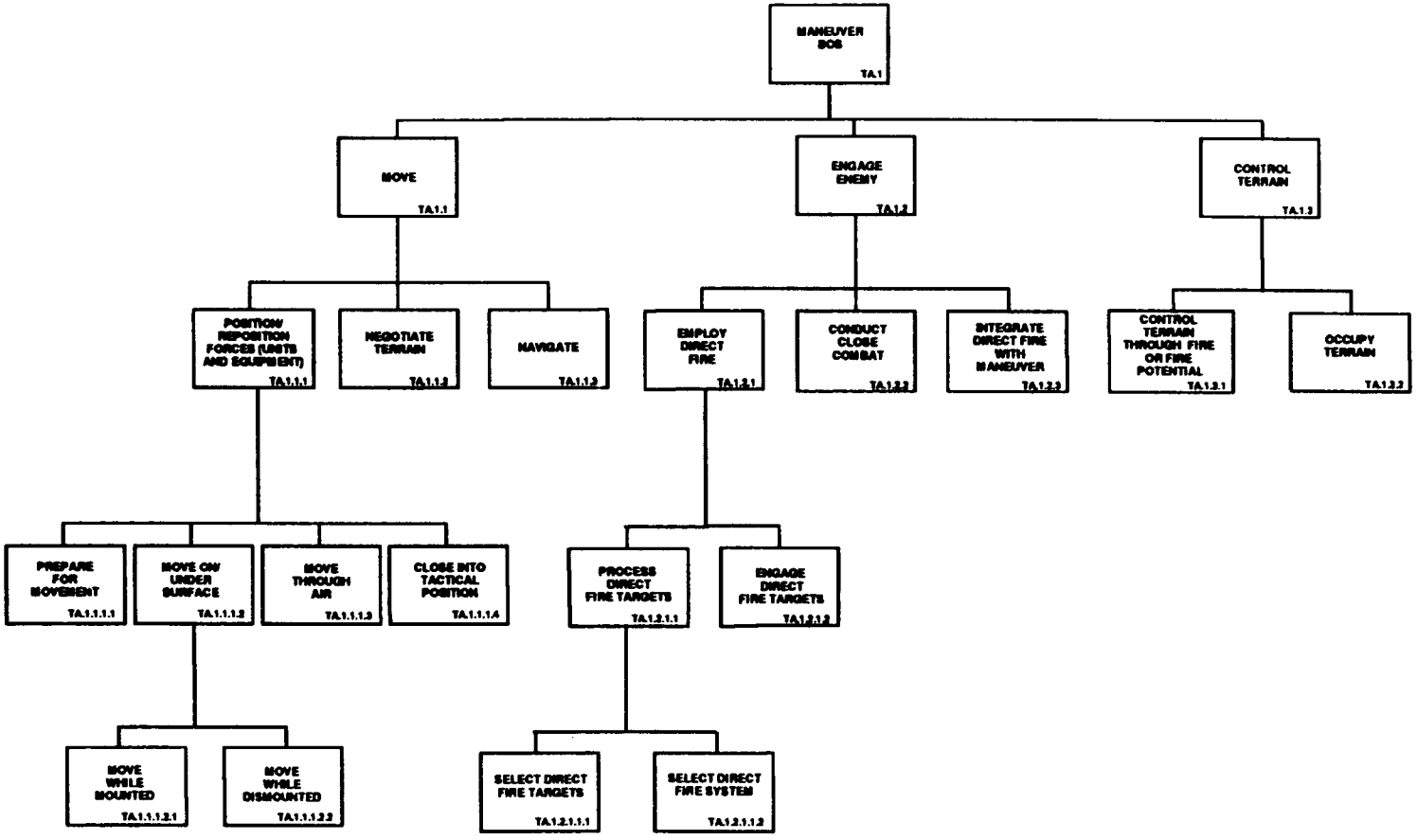


Figure 34. Maneuver BOS.

Although an inherent part of maneuvering on the battlefield, indirect fires are included under the Fire Support BOS, discussed below. Target acquisition is an intelligence function and is included under the Intelligence BOS. The movement of units, by whatever means, to include nonorganic transportation units falls under the Maneuver BOS; but the movement of supplies, equipment, and individual personnel and materiel on a transportation conveyance by a service organization is included in the CSS BOS.

Fire Support

The tactical Fire Support BOS is the collective and coordinated use of target acquisition data, indirect fire weapons, armed aircraft (less attack helicopters), and other lethal and nonlethal means against ground targets in support of maneuver force operations. The Fire Support BOS includes artillery, mortar, and other nonline-of-sight fires, naval gun fire, close air support, and electronic countermeasures.

The essential features of the Fire Support BOS are processing fire support ground targets and engaging ground targets. Processing ground targets consists of selecting the target and the engagement system and developing the order to fire. The commander, in issuing planning guidance, decision, concept, and intent under the C2 BOS, establishes priority of fires that governs the processing of targets. The issuance of the order to fire is a directive covered by C2 BOS. Figure 35 shows the Fire Support BOS; Appendix C gives the functions and their definitions.

The engagement of ground targets includes indirect fires and air-to-ground lethal means. Nonlethal support of forces that enhances the effects of fires includes jamming, psychological operations, the use of incapacitating or disabling agents, and countering target acquisition systems.

Again, target acquisition is an intelligence function and is included under the Intelligence BOS.

Air Defense

Tactical air defense is all measures designed to nullify or reduce the effectiveness of attack by hostile aircraft or missiles after they are airborne. It includes all weapons systems with potential to engage aerial targets.

The Air Defense BOS includes three major functions. The first function is processing of air targets (i.e., threat evaluation and engagement decisions at the fire unit level based on pre-defined rules and procedures). The second function is attacking air targets by lethal or nonlethal means. The third function is denial of airspace. Figure 36 shows the structure of the Air Defense BOS; Appendix C gives the Air Defense functions

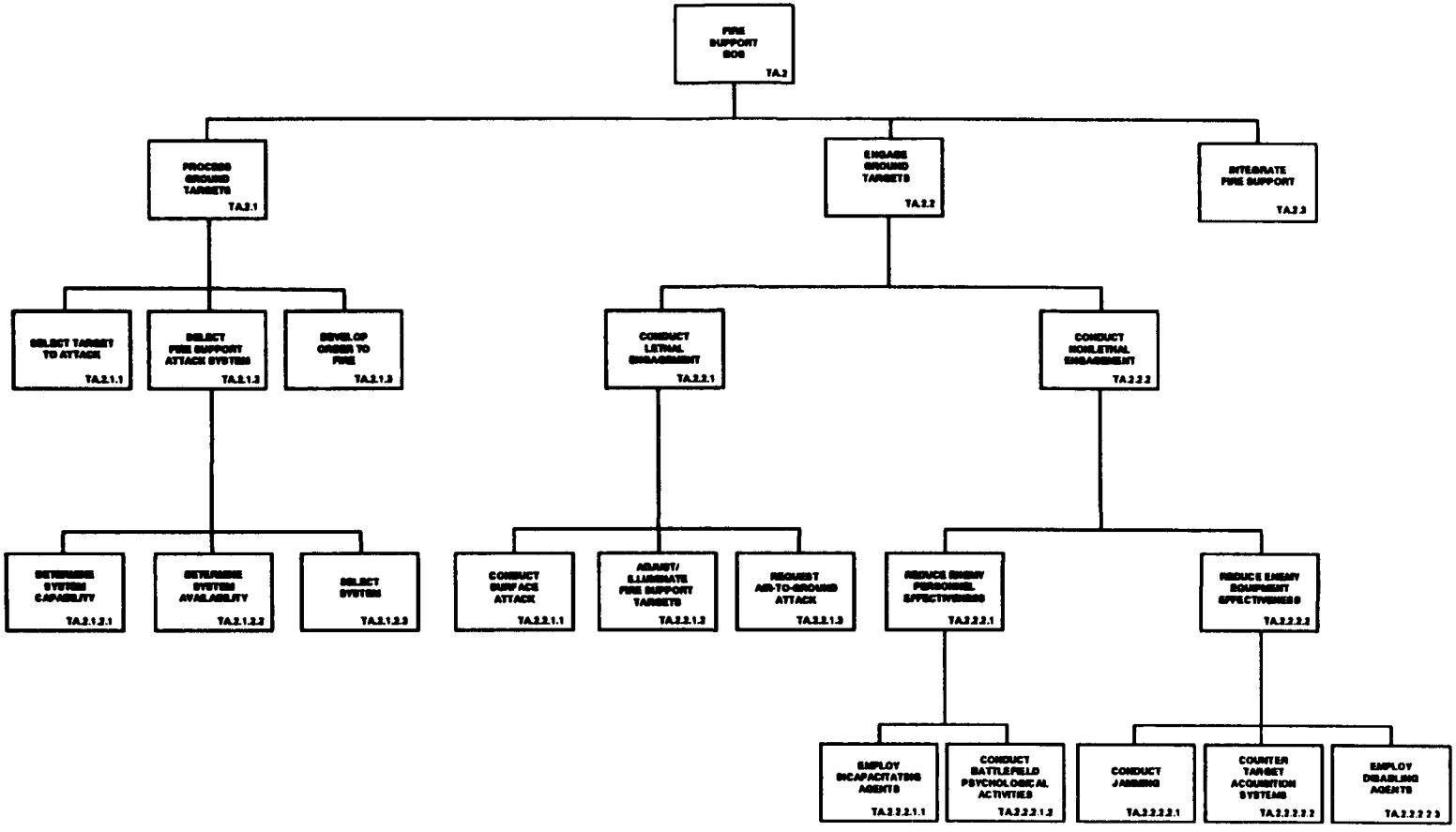


Figure 35. Fire Support BOS.

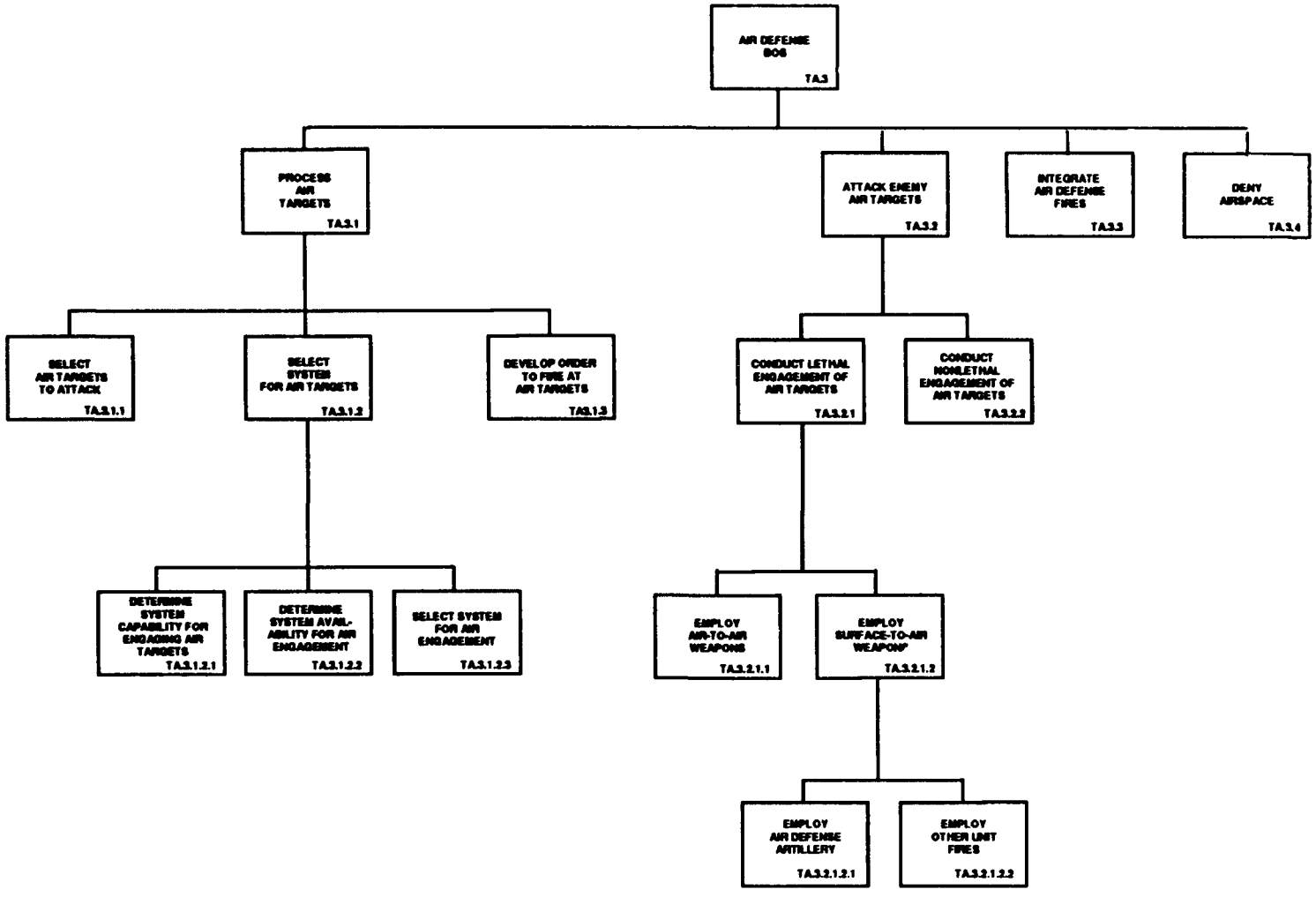


Figure 36. Air Defense BOS.

and definitions. The lethal engagement of air targets can be with air defense artillery, other unit fires (e.g., maneuver units), or air-to-air systems. Nonlethal engagement of air targets primarily includes jamming of navigational aids and weapons guidance systems. As is the case with direct and indirect fires, air defense target acquisition is included under the Intelligence BOS.

Command and Control

Tactical command and control (C2) is the exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.

The U.S. Army's C2 operational concept is the basis for the C2 BOS that is depicted in Figure 37; Appendix C gives the definitions for the C2 BOS. The C2 concept states that the function of C2 is the process of generating and applying combat power decisively. The C2 BOS specifies those functions that military leaders must perform in making sound and timely decisions and in directing the activities of assigned and supporting units. Information is the medium of the C2 process that results in two products, decisions and directives.

The functions in the C2 BOS are executed by every Army leader, at every echelon, in every branch, using the C2 system available for his or her particular unit. Because each leader from squad through Theater Army is a link in a hierarchy of military organizations, the C2 process and associated C2 systems are also linked to the next higher and lower echelons in the (organizational) hierarchy. The output of each C2 echelon consists of orders which serve as input to the C2 process at the next lower echelons. The feedback from the lower echelon serves as part of the input to the C2 process at the next higher echelon.

The C2 BOS lists all the C2 functions that are necessary to execute other BOS functions. In order to maneuver, a unit at any level needs command and control. To employ fire support, air defense, combat service support, and so on, Army organizations need command and control. Although the execution of the various Army functions and tasks are analyzed in the other BOSs, all command and control functions and tasks are analyzed under the C2 BOS. Information generated by executing functions in the other BOSs is fed back to the commander through the functions of the C2 BOS.

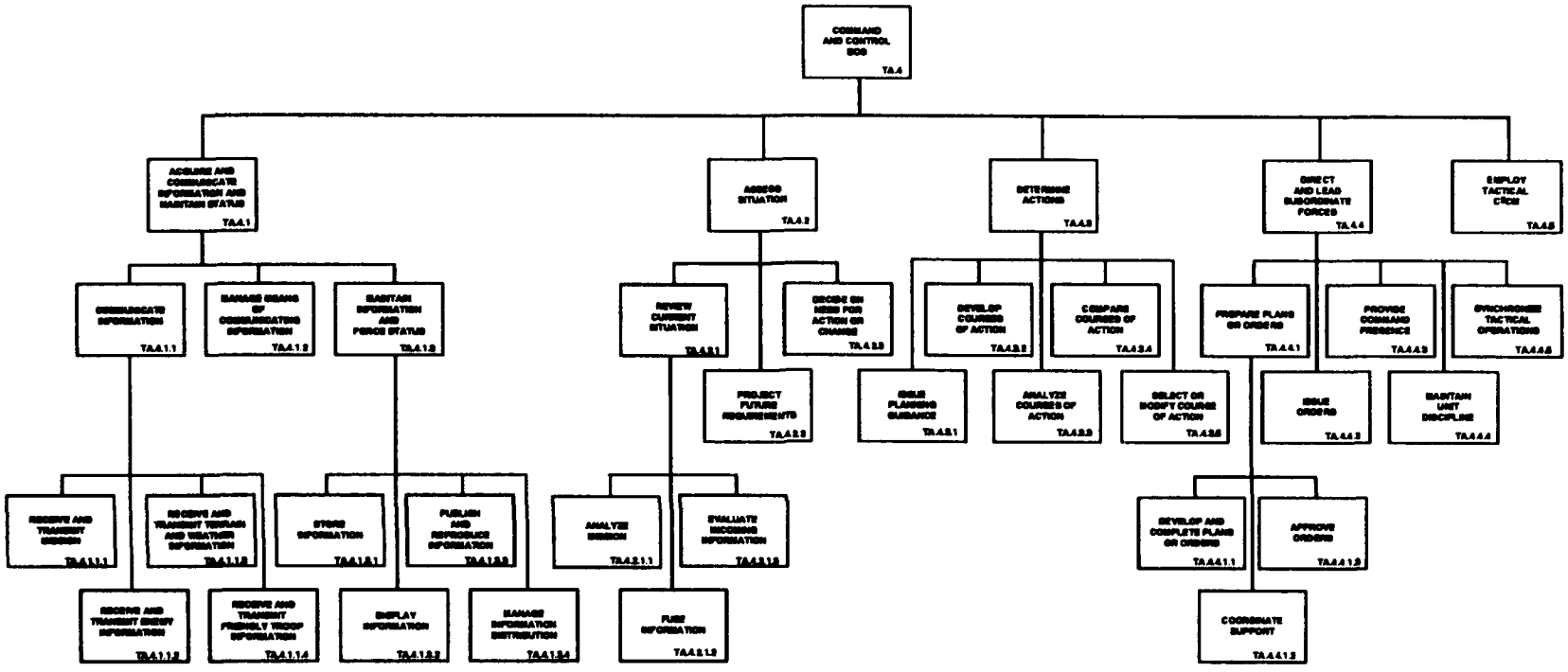


Figure 37. Command and Control BOS.

Although the Blueprint of the Battlefield is not a process model, the C2 BOS contains all the individual elements of the C2 process. It is the process of acquiring information, assessing whether any new actions are required, determining what these actions should be, and directing the appropriate action. Each C2 echelon continually acquires information about the mission, enemy, terrain and weather, and troops available through a variety of means. The information is sent and received, the means of communicating the information managed, and the information maintained in a form convenient to the decision-making process. All these functions are represented in the Blueprint's C2 BOS.

A distinction is made between the function of acquiring and communicating information and the intelligence function of collecting information. The C2 function of acquiring information refers to the physical aspect of exchanging mission, enemy, terrain, and troops available (METT) data or information with the C2 echelons under consideration. The intelligence function of collecting information refers to the process of collecting or generating enemy and terrain information from the battlefield environment.

Information acquired must be continuously assessed to determine if any action is required that is different from action resulting from the unit's most recent orders. Basically, it answers the question, "Does the unit have to do anything different from what it is now doing?" If different action is not required, the C2 echelon being considered continues to acquire and maintain information.

When a change in action is required, the C2 echelon must determine the required action. The C2 function here is to conduct the continuous process of making estimates and decisions for assigned or projected tasks. This function includes the commander's formulating his concept and intent. Inherent to this function is the planning for the conduct of all functions found in each BOS and for the conduct of related countermeasures.

These countermeasures include command, control, and communications countermeasures (C3CM). For example, the Determine Actions function covers planning for C3CM to include determination of (a) command, control and communications (C3) defensive measures for friendly critical command, control, communications and intelligence (C3I) facilities and capabilities, and (b) C3 offensive measures directed against enemy critical C3I facilities and capabilities. C3CM actions include operations security (OPSEC), deception, jamming, and fires. The actual conduct of the functions associated with these measures is analyzed under the BOS appropriate to each C3CM.

C2 is a continuous process. Courses of action are developed, analyzed, and a single course of action selected based on the information available. In subsequent C2 cycles,

modification of the course of action and associated decision based on newly acquired information is represented by the same functions in the C2 BOS. Also, because control is executed through the feedback of information and then assessment of that information, control of any mission is accomplished through the next iteration of the C2 cycle. However, the analyst need analyze a given C2 function only once to determine requirements and capabilities for that function regardless of the C2 cycle.

Intelligence

The Intelligence BOS is the collection of functions that generate knowledge of the enemy, weather, and geographical features required by a commander in planning and conducting combat operations. It is derived from an analysis of information on the enemy's capabilities, intentions, vulnerabilities, and the environment.

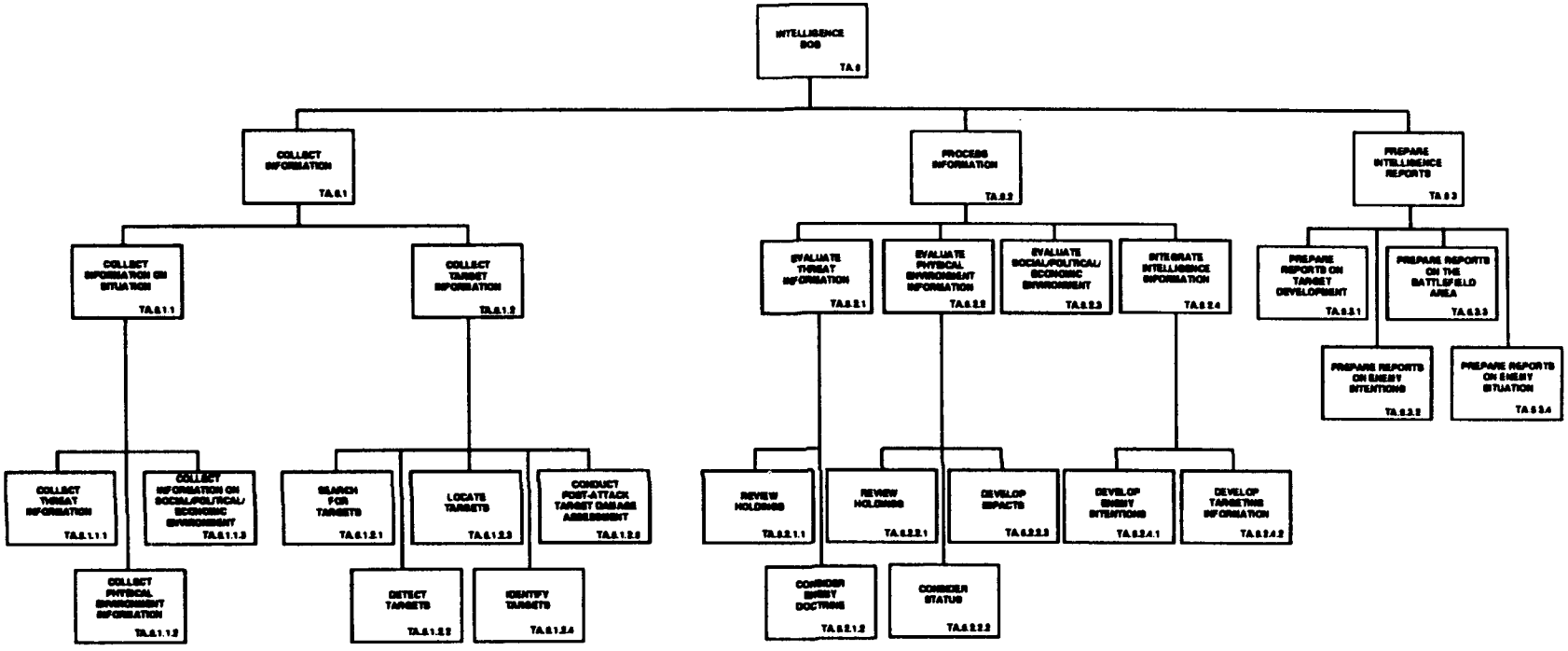
Figure 38 shows the major functions of the Intelligence BOS-- collecting information, processing that information, and preparing intelligence reports; Appendix C gives the functions and their definitions. Information is collected on the situation (includes threat, physical environment, and social/political/economic environment) and targets (target acquisition). The target acquisition system may be closed loop (i.e., target acquisition system is an inherent part of friendly weapons system) or open loop (i.e., target acquisition system is separate from the firing system but nevertheless is part of the overall weapons system).

In the discussion of the C2 BOS, a distinction is made between the function of acquiring and communicating information and the intelligence function of collecting information. That same distinction is repeated here for clarity. The C2 function of acquiring information refers to the exchange of METT data or information with the C2 echelons under consideration. In contrast, the intelligence function of collecting information refers to the process of collecting or generating enemy, weather, and terrain information from the battlefield environment.

Other key features are noteworthy. Target damage assessment is a subfunction of "Collect Target Information." Although the preparation of intelligence reports is a function of the Intelligence BOS, the issuance of intelligence reports is a C2 function included in the C2 BOS.

Mobility and Survivability

The Mobility and Survivability BOS describes the functions of the force that permits freedom of movement relative to the



NOTE: For disseminating tactical intelligence, see Function TA.4.1.1 Communicate Information.

Figure 38. Intelligence BOS.

enemy while retaining the ability to fulfill its primary mission. The Mobility and Survivability BOS also includes those measures that the force takes to remain viable and functional by protection from the effects of enemy weapon systems and natural occurrences.

The Mobility and Survivability BOS includes all functions for enhancing friendly forces mobility (e.g., overcoming obstacles) and functions that enhance the effects of friendly weapon systems (e.g., channeling the enemy or stopping or slowing his movement). The user should recognize the distinction between the Maneuver BOS and the Mobility and Survivability BOS. Specifically, the Maneuver BOS lists those functions pertaining to moving for positional advantage, whereas the Mobility and Survivability BOS lists those functions pertaining to enhancing friendly movement or degrading enemy movement.

This BOS also includes all measures for avoiding enemy detection and reducing the effects of enemy weapons (e.g., deception, OPSEC, security). Figure 39 depicts functions of the Mobility and Survivability BOS; Appendix C gives definitions.

Some of the functions associated with nuclear, biological, and chemical (NBC) activities are located in the Mobility and Survivability BOS. For example, actions taken to avoid NBC hazards, to protect individuals and systems during contact, and to remove these hazards after contact are covered under function TA.6.3.1 Provide Battlefield Hazard Protection. Offensive NBC activities are covered for the most part in the Fire Support BOS under function TA.2.2.1 Conduct Lethal Attack and the function TA.2.2.2 Conduct Nonlethal Attack.

Combat Service Support

The CSS BOS is the support and assistance provided to sustain forces, primarily in the fields of logistics, personnel services, and health services.

The CSS BOS contains functions and services (whether provided by the U.S. Army, host nation, or contracted support) required to man, arm, fuel, fix, and move the Army in combat operations. The CSS BOS also includes functions to build and maintain facilities and provide military police support. Figure 40 depicts the CSS functions; Appendix C gives definitions of the functions.

The basic functions of the CSS BOS are manning, arming, fueling, fixing, distribution, providing sustainment engineering, and the provision for military police support. Manning is the support operations that assure the uninterrupted flow of fighting

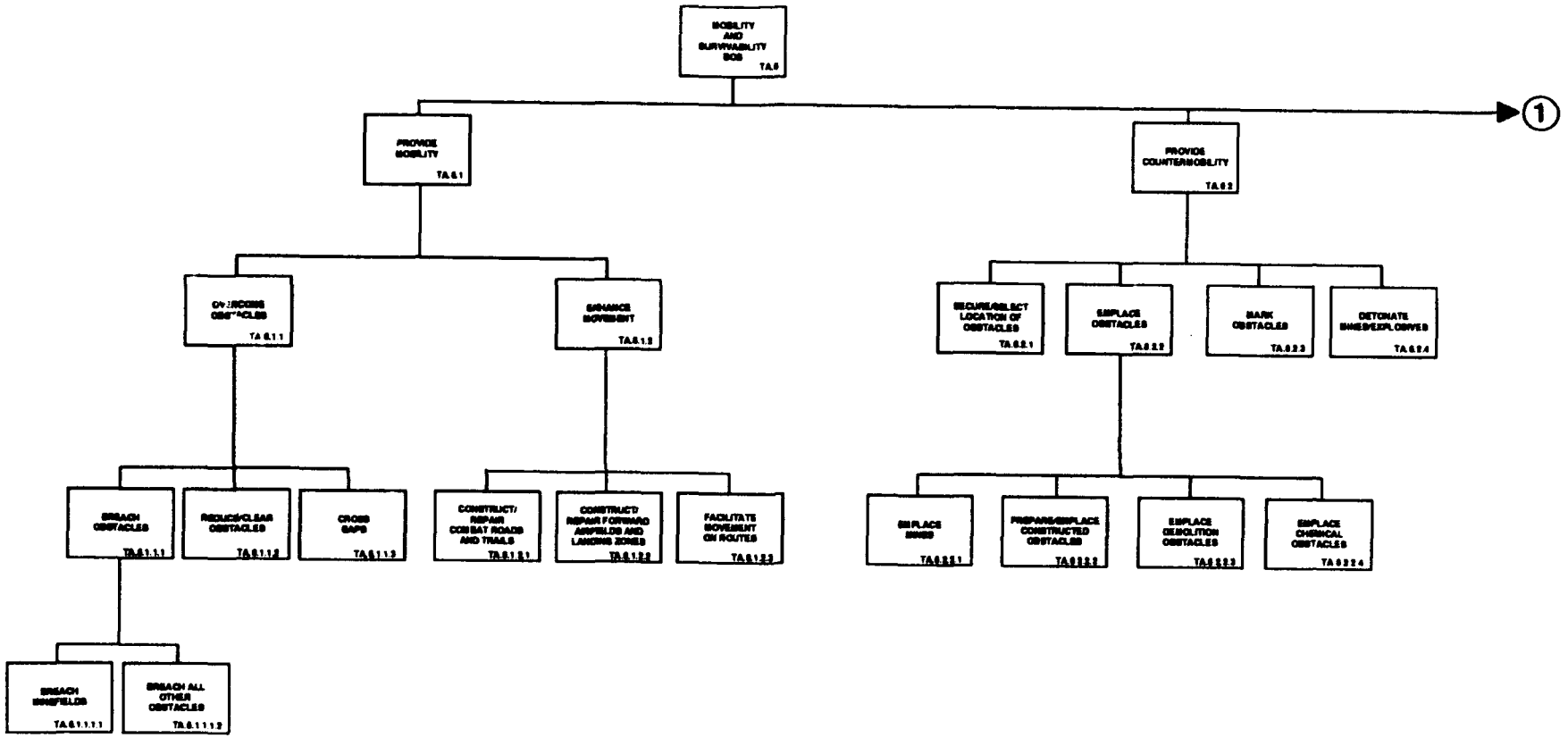


Figure 39. Mobility and Survivability BOS.

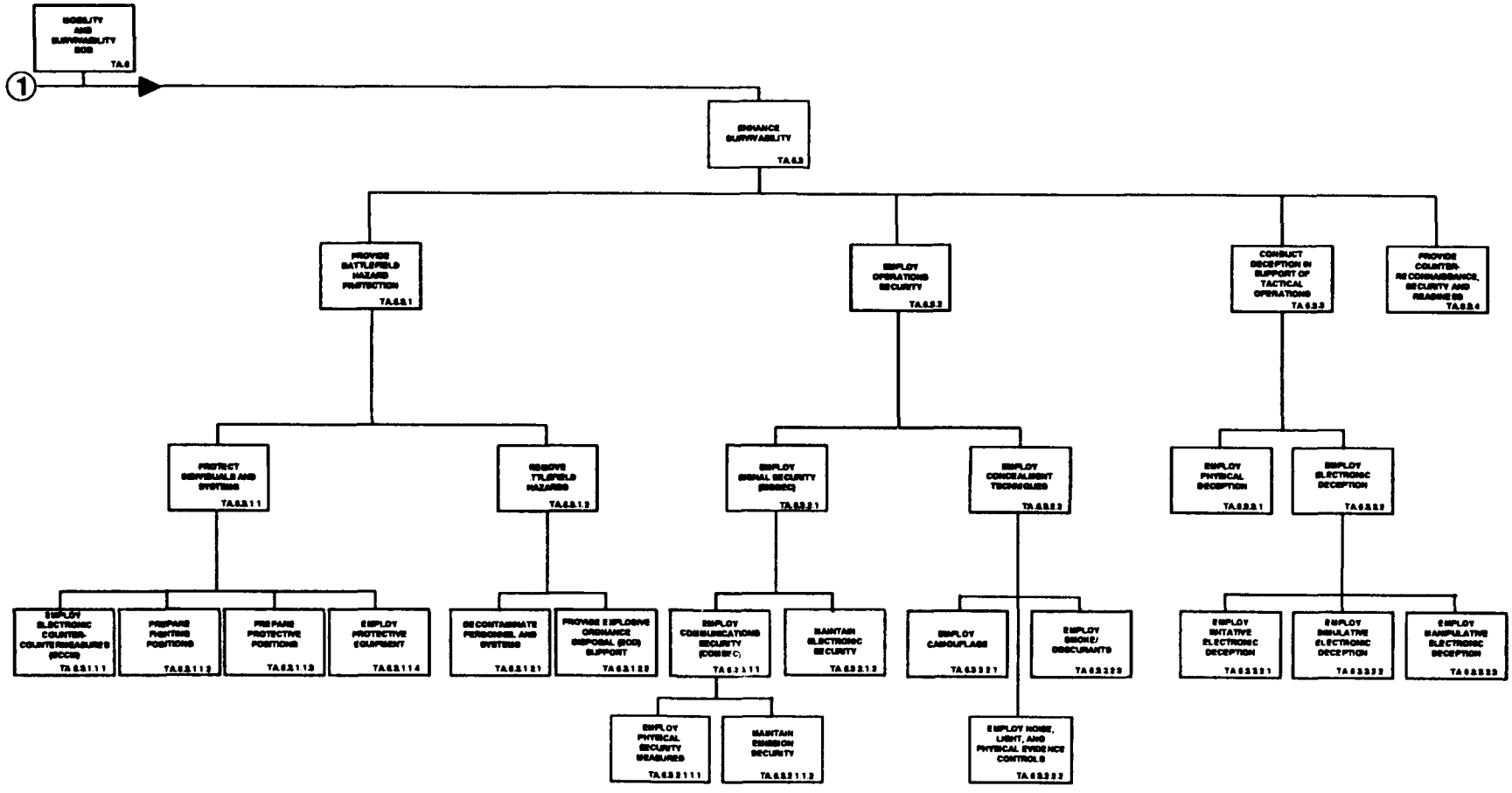


Figure 39. Mobility and Survivability BOS (continued).

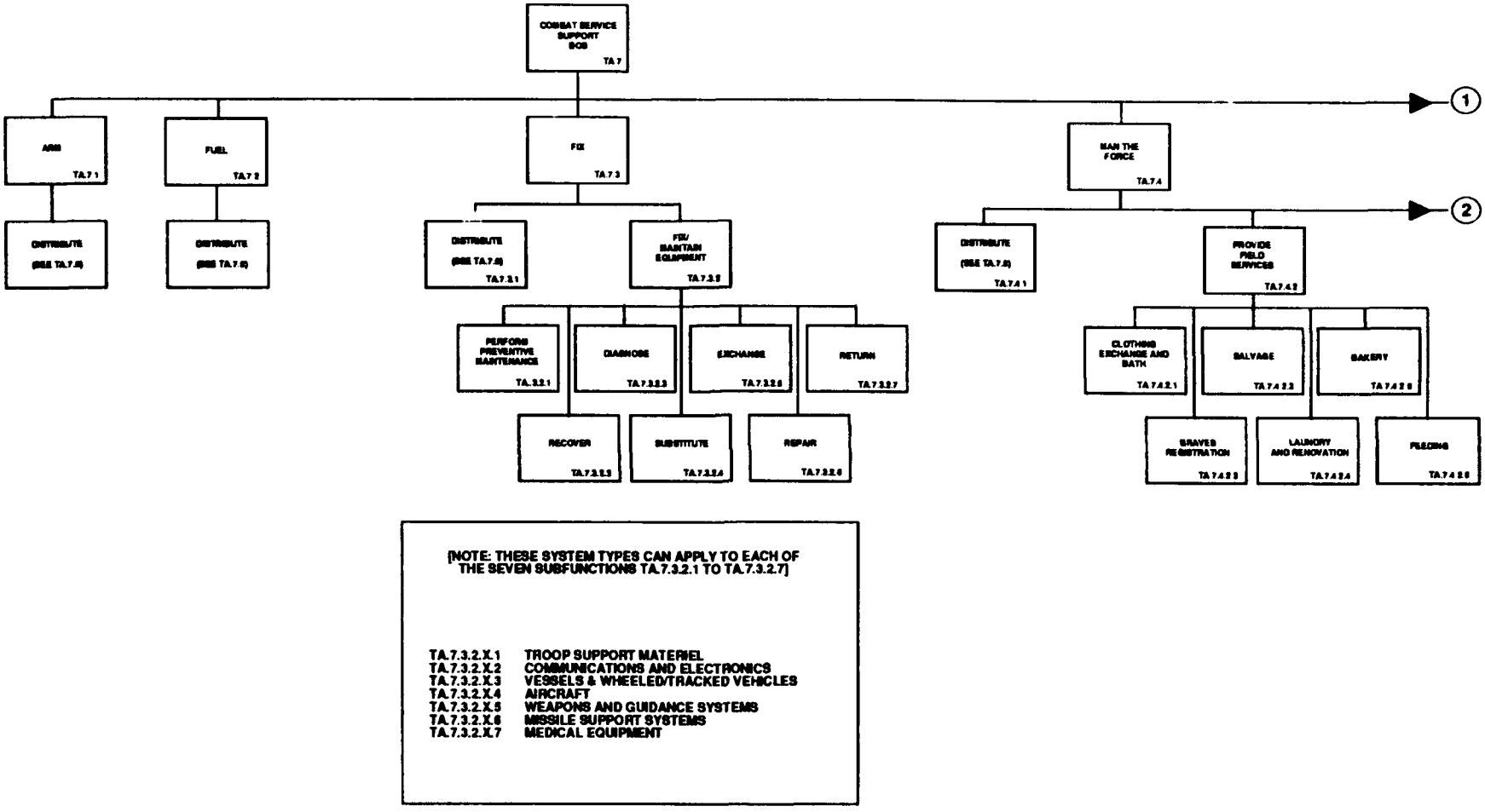


Figure 40. Combat Service Support BOS.

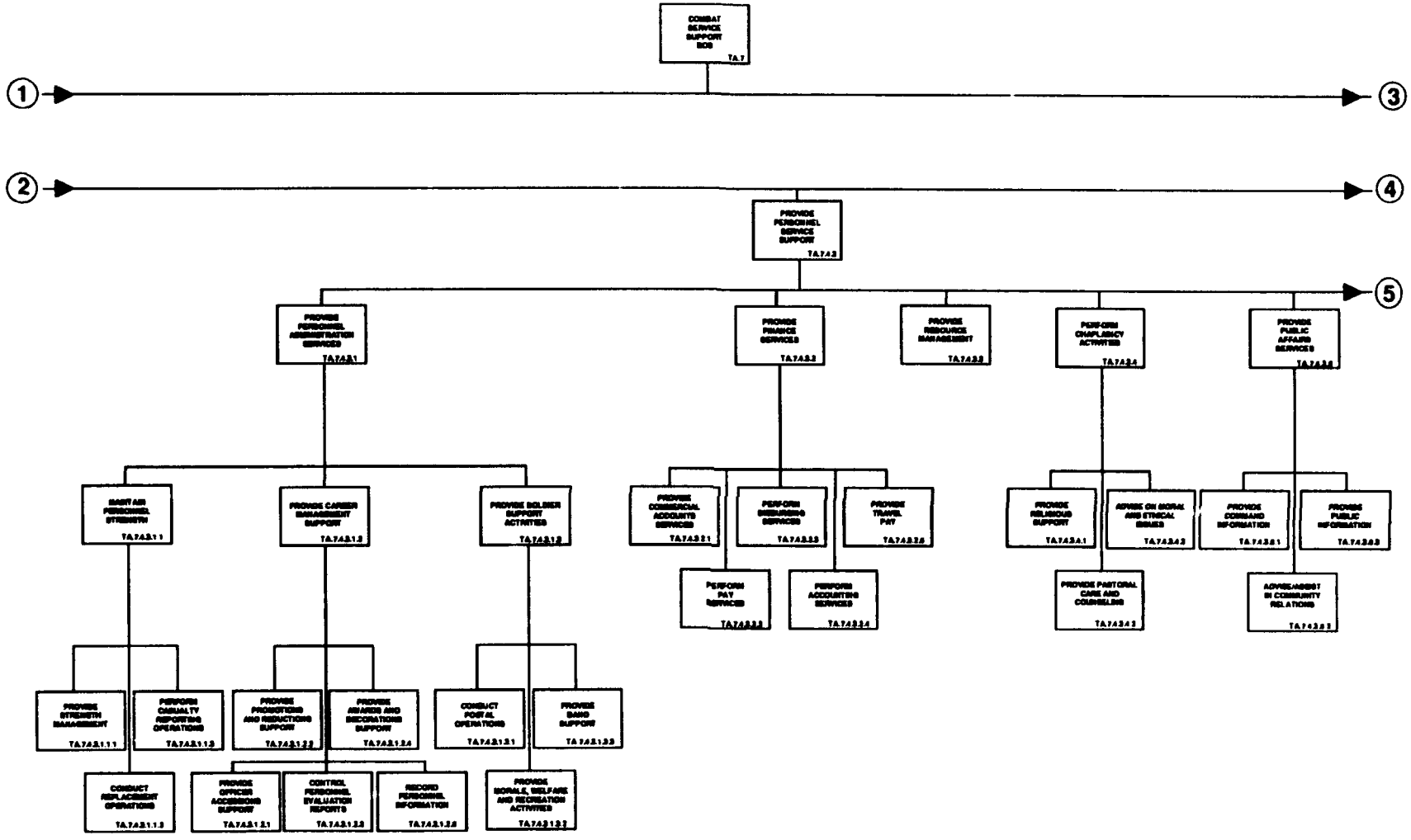


Figure 40. Combat Service Support BOS (continued).

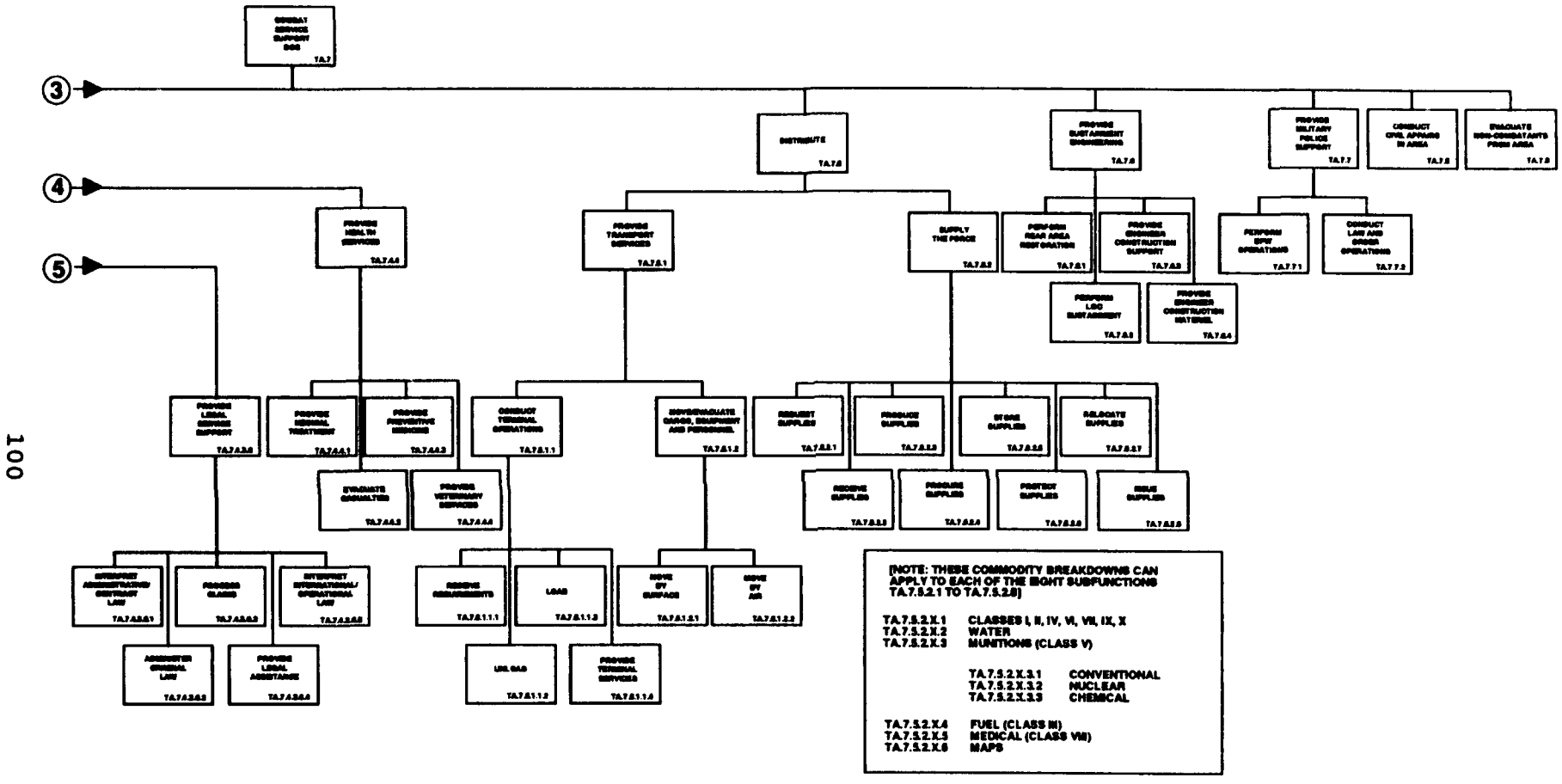


Figure 40. Combat Service Support BOS (continued).

men to the battle area and to provide personnel services during operations. Manning includes field services, health services, administrative support, chaplaincy activities, morale support, and replacement operations.

Arming is the provision of munitions to the weapon systems. Fueling is the provision of required fuels to weapon systems and other equipment. Fixing transcends maintenance in that it preserves the availability of weapon systems and equipment and includes the provision of repair parts. The function of distribute pertains to providing all classes of supplies, equipment, and replacement personnel to the units when they are needed. Distribution includes terminal transfer operations and the shipment of cargo and personnel.

The sustainment engineering function refers to restoring, building, and maintaining of facilities that support combat operations. The maintenance of military law and order, and the control of prisoners of war, is represented by the provided military police support function.

Linkage of Blueprints

Purpose

This section discusses the linkage of functions among the three Blueprints for the three levels of war. The linkage reflects the continuity that exists in the activities or functions from the National Command Authorities making policy and establishing strategic aims down to the activities of individual soldiers at the tactical level of war. This continuity crosses the levels of war and the Blueprints (see Figure 41). The importance of establishing linkages in the Blueprints can be illustrated by the need to articulate how Service programs support the warfighting CINCs. The Services need a structure that identifies all of the major activities performed at each level of war. The Services also need to connect the activities at one level of war to those occurring at other levels, i.e., vertical linkages to show the importance of funding complementary, but not obviously related, programs. The Blueprint provides the structure and this chapter addresses the vertical linkages.

Types of Linkages

Fundamentally, there are two types of linkages that can be described among functions in the Blueprint, i.e., vertical linkages and horizontal linkages. The first type, vertical linkages, connects elements (e.g., functions) at one level to related elements at another level of war. The second type of linkage, called horizontal, connects fundamentally different functions occurring at the same level of war. Horizontal linkages involve the synchronization of a variety of Blueprint functions in time and space based on an analysis of the

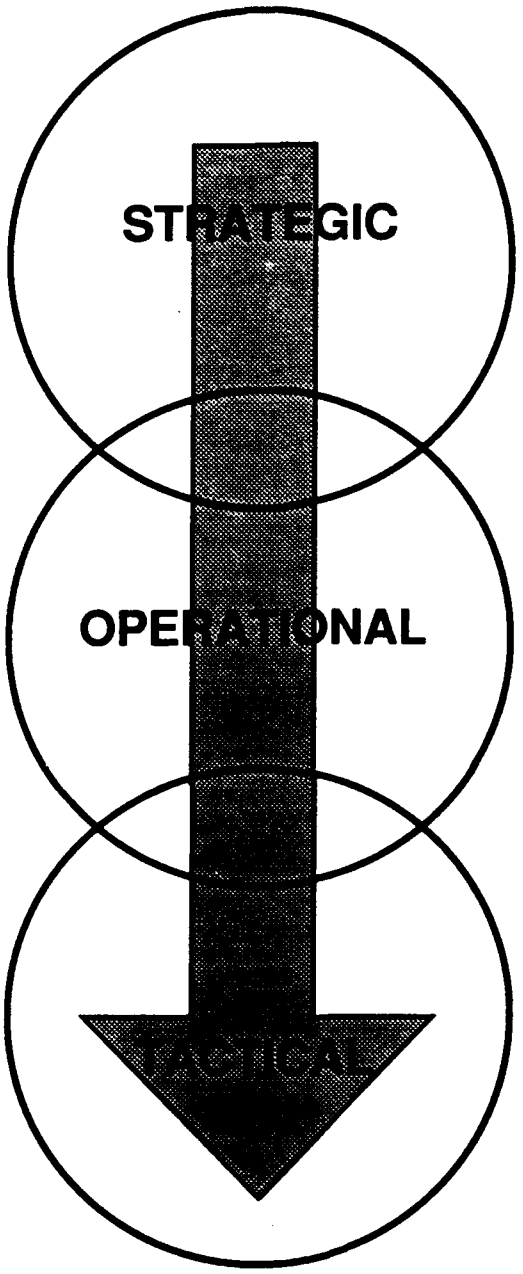


Figure 41. Levels of war are a continuum.

situation. These horizontal linkages are the function of the dynamics of command and control and the product of military doctrine and training and will not be addressed here. However, the function of synchronization is present in each level of the Blueprint. The vertical linkages are the focus of the following discussions.

A vertical linkage can be defined as the connecting structure that describes the relationship among the elements of the Blueprints across the strategic, operational and tactical levels of war. Intelligence is an example of a function with vertical linkages across the levels in the Blueprint. Intelligence related functions exist at every level of war. Although the precise intelligence activities performed at the strategic, operational, and tactical levels differ, they are generally connected. At the strategic level, national means collect, analyze, assess, prepare and disseminate intelligence to many users at the strategic level, including theater commanders. CINCs in turn disseminate the intelligence to operational level commanders, and in turn to tactical level commanders. Sometimes national intelligence is disseminated directly to tactical commanders. Conversely, information and intelligence are passed up by tactical commanders through the same chain to the national level where it is collated, analyzed, and assessed to form a worldwide intelligence picture.

While vertical linkages can be described in a general sense, these linkages are not always realized during actual situations. For example, the intelligence system is highly compartmentalized. Intelligence is shared strictly on a need to know, in peace or war. Sometimes elements in the chain of command or their staffs are not provided available intelligence. In World War II, for example, national leaders had intelligence on the enemy which they could not pass to subordinate levels for fear of revealing their sources. So, actual linkages among the levels of the Blueprint are situation dependent. This compartmentalization is true across the operational continuum. Still in a general sense, these "potential" linkages can be described and subsequently analyzed depending upon the situation or scenario.

Operating systems and functions in the three Blueprints in many cases have similar wording. Nevertheless, they are qualitatively different at the various levels of war. Intelligence is one such function. Although the generic elements of strategic, operational, and tactical intelligence are similar (i.e., collection, processing, integration, analysis, evaluation, and interpretation), the activities (function/subfunctions) associated with each level are distinct. Indeed, JCS Pub 1-02 not only provides different definitions for strategic and tactical intelligence but adds "Strategic intelligence and tactical intelligence differ primarily in level of application but may also vary in terms of scope and detail." The activities performed by the Deputy Chief of Staff for Intelligence, HQDA are vastly different from those performed by the S-2 (Intelligence

Officer) of a maneuver or other battalion. So also are the functions performed by the Defense Intelligence Agency and J-2, Joint Staff different from those performed by the J-2, CENTCOM. Thus, intelligence functions at the three Blueprint levels are distinctive, but they also have potential linkages.

There are three kinds of vertical linkages among Blueprints discussed in this chapter, namely:

Integration of ends, ways and means.

Linkage of operating systems between Blueprints.

Linkage of individual functions/subfunctions between Blueprints.

Integration of Ends, Ways and Means

Strategic direction is the guidance expressed through national security strategy, national military strategy, and theater strategy relative to the attainment of strategic goals and objectives. Strategic direction links ends, ways and means in each of these strategies to those in theater campaigns, subordinate campaigns/major operations, and battles and engagements. Figure 42 shows these relationships. In wartime, it is this linkage which connects battles and engagements to national strategic objectives.

The concept of strategic direction provides a macro approach to linking the three Blueprints. It is the most important link; because it establishes the relationship among the objectives, concepts and intent, and resources of strategies and plans of commanders from the National Command Authorities (NCA) through unified commanders and operational level commanders to tactical commanders and troops. It is that all important relationship that connects national strategic objectives and goals to the tactical objectives of battles and engagements. The three strategies (i.e., national security, national military, and theater strategies)integrate national and military objectives, national policies and military concepts, and national resources, military forces, and supplies. CINC theater strategies provide direction for the employment of joint, Service, and combined forces in operational level campaigns and major operations that in turn guide tactical commanders' plans and battles. In this way, tactical level activities are linked through the operational level to the elements of the strategic level.

This same approach permits linking objectives. Table 10 gives the relationship of objectives at various levels of war and related Blueprints.

The user should not confuse this linkage with that of linking the operating systems or their functions/subfunctions as

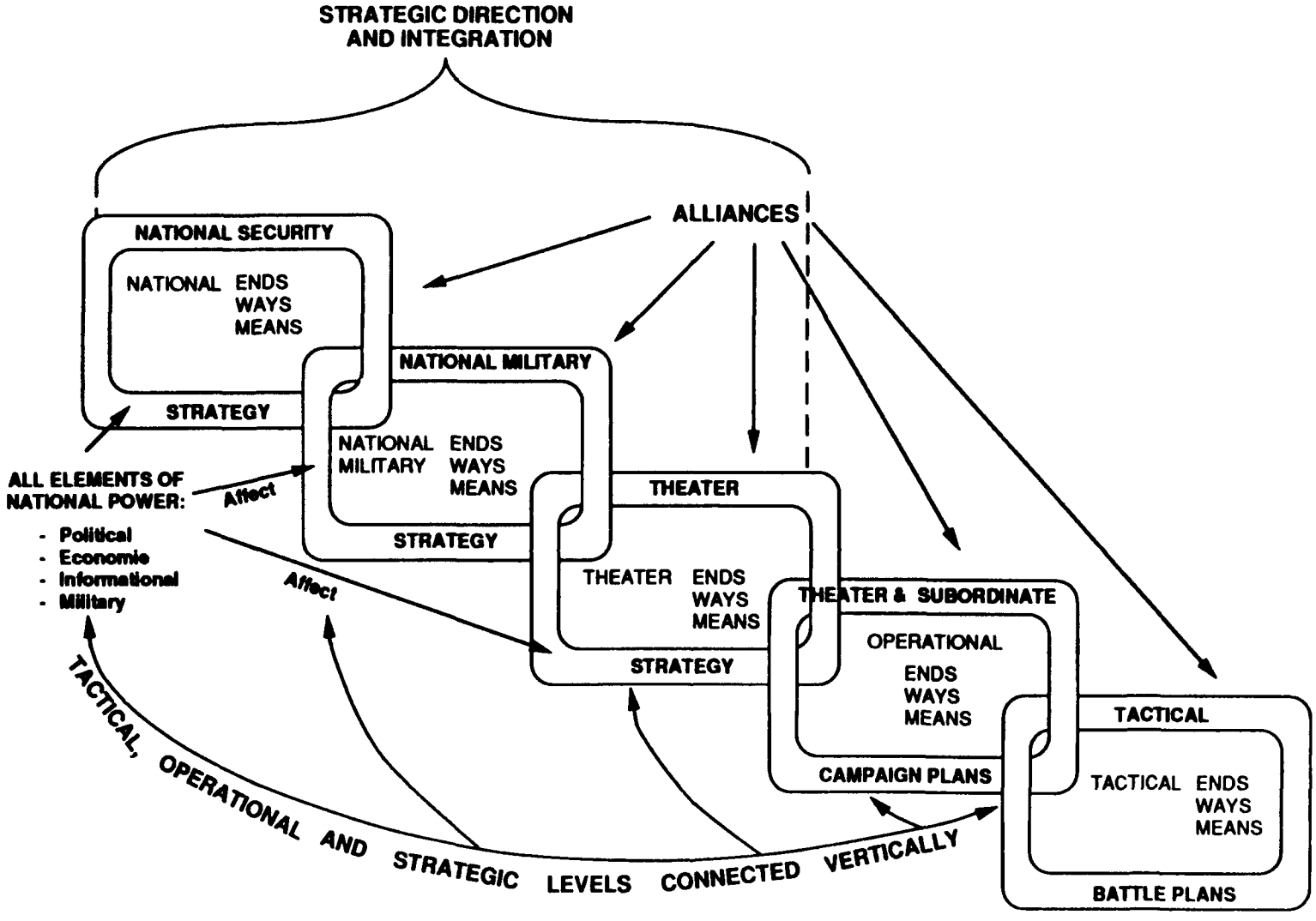


Figure 42. Vertical linkage of functions through strategic direction and operational/tactical C2.

Table 10

Relationship of Levels of War to Aims or Objectives

Level of war	Determines	Achieved by	Sets for subordinate level
Strategic			
• National** security	• National security objectives* • Political/military limits and risks • National/alliance policy • National security strategy	•All elements of national power	•Direction to secdef, cjcs, and military depts •National/alliance security or strategic military objectives, policies, goals •Forces for global commitments
• National military	• National military objectives* • Strategic military risks • National military strategy and global war plans	•Military element of national power •Strategic military forces	•Direction to unified/theater commanders •Theater strategic objectives •Sequence of initiatives •Forces for combatant commands
• Theater	• Theater strategic objectives* • Theater military risks • Theater strategy and campaign plans	•Theater forces and other capabilities (unified/joint/combined)	•Direction to operational forces •Strategic military objectives for theaters (and areas) of operations •Sequence of military initiatives •Forces for theaters (and areas) of operations
Operational	• Operational objectives* • Unacceptable theater military risks • Subordinate campaigns/major operations plans	•Operational forces (joint/combined)	•Direction to tactical forces •Achievable specific tactical military objectives •Sequence major operations and battles •Forces for tactical operations
Tactical	• Tactical military objectives* • Battles and engagements plans	• Tactical forces	•Tactical military objectives

Included in Blueprint of the Battlefield

* Objectives are included in strategy and plans

** The national component of the strategic level of war is beyond the scope of the blueprint of the battlefield ; the national security strategic component is sometime referred to as national strategic component of the strategic level of war.

explained below. The vertical linkage through strategic direction exists with or without Blueprints. It is not just linking functions/subfunctions or operating systems. Strategic direction in this case is inherent to command and the strategies developed through command. Accordingly, it is an intrinsic linkage of the Blueprint of the Battlefield. If the objectives, concepts and resources of the strategies and plans of the three levels are not connected, than failure at one or more of the levels is probable. The Vietnam War is a prime example.

Vertical Linkage of Operating Systems

The vertical relationships among the operating systems in the three Blueprints are shown at Figure 43. Operating Systems, the major functions occurring at each level of war, are elements of the Blueprints which permit a straight forward connection.

Operating systems in Part 1 of the Strategic Blueprint are lined to operating systems in part 2. Theater strategic operating systems are linked to operating systems in the Operational Blueprint which in-turn are linked to operating systems in the Tactical Blueprint. For purposes of clarity, the operating systems have been rearranged; but their original designation remains unchanged.

In addition to linking operating systems among the Blueprints, the functions and subfunctions of these operating systems can be linked to related subfunctions in another Blueprint. While the linking of operating systems is sort of a macro linking of major functions, the subordinate functions and subfunctions can be linked in a more detailed sense.

Vertical Linkage of Functions and Subfunctions

Many subfunctions of each Blueprint potentially link with related functions in adjacent Blueprints. The connections are numerous and complex. They are discussed briefly and a few examples are provided. Software tools for assisting the task or function analysis which provide a user-computer interface optimized for doing systems analysis might be required. However, for practical reasons these linkages are not pursued further in this pamphlet.

Figure 44 provides an example of linkages at the function and subfunction level across Blueprints. Maneuver at the tactical level deals with achieving positional advantage over an enemy force in conjunction with fire support. Depending upon the operation this tactical maneuver achieves a more advantageous friendly force position in a battle or engagement for more effectively bringing fires to bear on the enemy. It could provide a more favorable position for further maneuver, or simply for achieving the tactical objective(s).

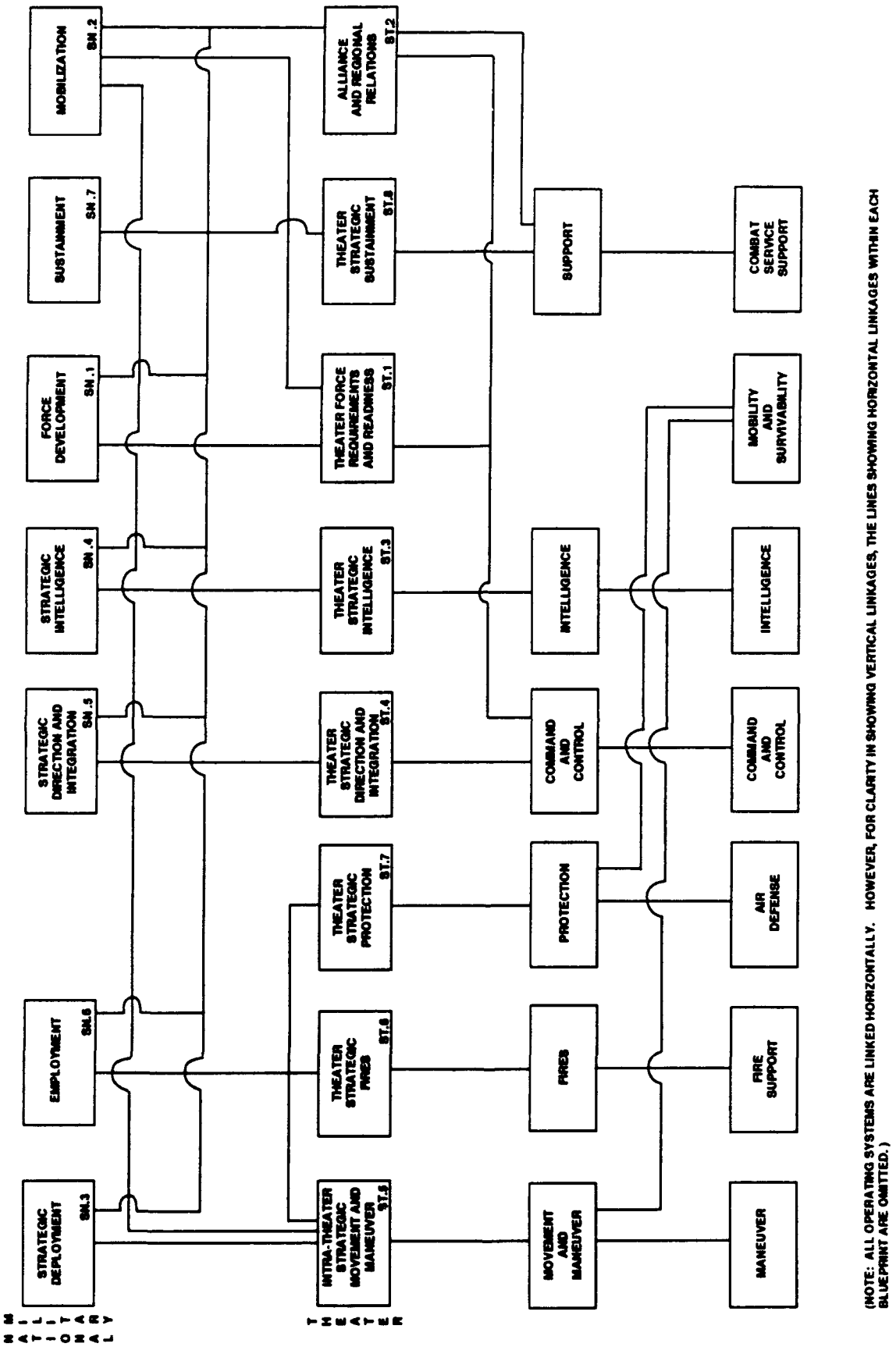


Figure 43. Vertical linkages: Blueprint operating systems.

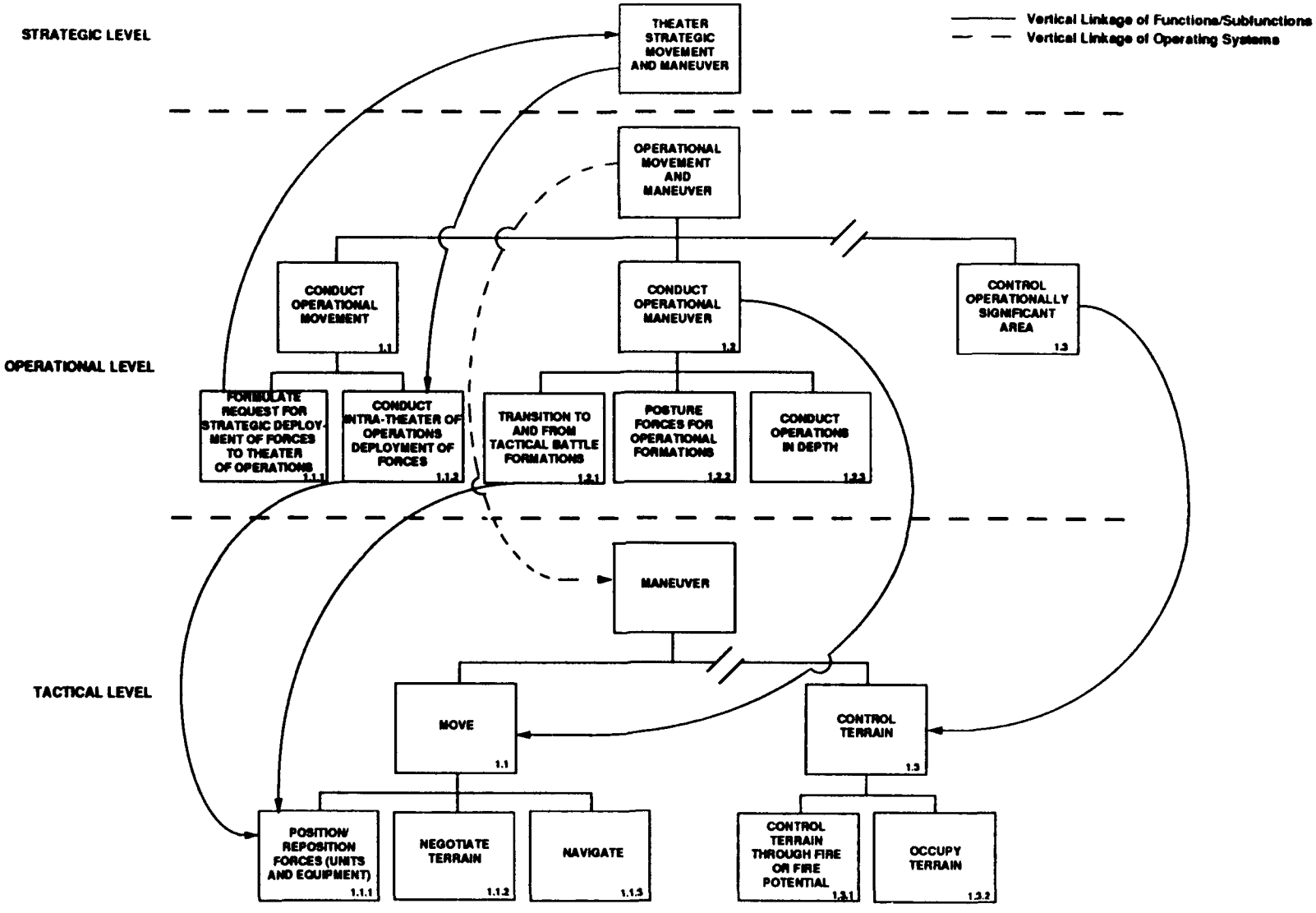


Figure 44. Linkage of functions across the levels of war.

Before bringing forces to bear on the enemy in battle, functions at the strategic and operational levels potentially might be required. Strategically, forces might have to conduct a theater strategic movement and maneuver based on a request from the operational commander. Once in the theater, or area, of operations it may be necessary to further conduct intra-theater of operations deployment of these forces to move them into positions which will give them a relative advantage over the enemy operational forces and support the operational commander's maneuver concept for his subordinate campaign plan. This operational movement and maneuver could also put the tactical forces into positions from which they can deploy and conduct tactical maneuver and employ direct and indirect fires. Thus, these functions/subfunctions are potentially linked.

In a similar scenario, these functions might be linked from the bottom up, i.e., tactical level upward. The results of tactical level maneuver could achieve an advantageous position over the enemy. At the tactical level a penetration, or flanking, maneuver might achieve success and permit maneuver to operational depths (e.g., exploitation and pursuit) and further achieve operational and theater strategic objectives.

As described above, operational movement and maneuver can be linked to tactical maneuver as part of a system of systems. Figure 44 also shows other specific vertical linkages of functions across different levels of war. Again, these linkages are situation dependent.

Many other examples could be cited where functions can be linked. The vertical linking of the functions across Blueprints can be an important element in analysis. It can contribute to the conduct of trade-offs among deficiencies and solutions under the CBRS. The linking could provide the structure for presenting a Service's program to OSD and Congress by demonstrating how that program supports various CINCs. Failure of any one of the linked functions might cause failure of the system.

Issues Related to Blueprint Development

Purpose

This section provides a summary of the issues that occurred during the Blueprint development process. All issues were resolved either through consensus or through decision. The vast majority of points were resolved through consensus, thus becoming nonissues. Therefore, this section addresses only issues resolved through decision.

Summary of Issues

Decisions were made by the ADCSCDD or the DCSCDD, HQ TRADOC, or the Commander TRADOC. Also, issues were decided at HQDA by the ADCSOPS, Force Development when the lead for the Blueprint

was at HQDA. In the case of the Tactical Blueprint, a general officer steering committee was formed consisting of the Deputy Chief of Staff for Concepts and Doctrine, Deputy Chief of Staff for Concepts, Doctrine, and Developments, and the Commander TRADOC Analysis Command. Issues decided by the ADCSCDD and DCSCDD, HQ TRADOC were also briefed to the Commander TRADOC, who concurred in those decisions. These Army leaders are collectively responsible for the Army's combat developments, doctrine developments, concepts developments, training developments, leader developments, unit designs, and force developments and their related programming and budgeting. However, regardless where the decision was made, both headquarters were informed of the issue and the decision. In every case, both headquarters agreed.

While developing the Blueprint, research analysts sometimes did not agree on wording of a function, a specific definition, or where a particular function or set of functions should be placed in the hierarchy. This interaction is considered part of the normal deliberative, hueristic process and is not reported here.

There were many discussions with various organizations during the course of Blueprint development. Often during these discussions, the Blueprint developers were informed, and in some cases participated in, on doctrinal issues that may have affected the Blueprint. Many doctrinal issues concerned evolving joint doctrine. It was the Blueprint developers task to become informed of these issues and keep the Blueprint consistent with doctrine to the best of their ability. Key players gave freely of their time and source documents to assist the Blueprint developers in this effort. Also, these key players kept developers informed on the resolution of doctrinal issues even when they had an opposing view. Some doctrinal issues remain unresolved and will remain so until the joint pubs are published. Every effort was made to stay current as various iterations of joint and service doctrine was disseminated. This summary does not attempt to document these doctrinal issues, unless they affected the end product and were addressed by the decision makers.

Tables 11, 12 and 13 categorize the issues by Blueprint, i.e., Tactical, Operational, and Strategic, respectively. The summaries include the type issue, a brief statement of the issue and the decision. There are two basic types of issues, namely:

Blueprint structure, and

Operating system definition.

Table 11

Tactical Blueprint Issues Summary

Type Issue	Issue Description	Decision
Blueprint Structure	Should direct and indirect fire attack of ground targets be combined under a BOS called Fires?	No! Put direct fire under Maneuver & indirect fire under Fire Support.
	Place mobility functions under Maneuver & countermobility under Fire Support?	No! Retain original seven BOSs.
	Add countermobility to title and definition of Mobility and Survivability BOS?	No! Retain Mobility & Survivability BOS title, but add subfunction. Provide Countermobility.
	Add generic task level to Blueprint	Yes! But not specific tasks
Definitions	What is definition for Maneuver BOS?	Use JP 1-02 definition.
	What is definition for Air Defense BOS?	Use FM 44-1 definition modified by JP 1-02.
	What is definition for Command and Control BOS?	Use FM JP 1-02 definition.
	What is definition for Intelligence BOS?	Use FM 101-5-1 definition.
	What is definition of Mobility & Survivability BOS?	Recommended definition modified; see Blueprint definition, TA.6.
	What is definition of CSS BOS?	Use JP 1-02 (NATO), as modified.

Table 12

Operational Blueprint Issues Summary

Type Issue	Issue Description	Decision
Blueprint Structure	Use seven BOS as operating systems for the Operational Blueprint?	No! Change to six: Operational Movement & Maneuver, Fires, Protection, Command and Control, Intelligence, and Support
	Should support of forces at operational level be called combat service support, sustainment or support the force?	Use Operational Support! This designation evolved from the other three terms.
	Should Mobility & Survivability continue to be used at operational level?	No! Change Survivability to Protection and include other functions relating to protecting the force (i.e., AD); move mobility and countermobility functions to Operational Movement & Maneuver.
	Use Fire Support or Fires operating system?	Use Fires.
	Should Movement operating system be changed to Operational Movement & Maneuver?	Yes! Operational forces maneuver and move within theater, or area, of operations at operational level.
	Should deception be a separate operating system?	No! Extremely important function but, like air defense, is for protecting the force.
	Should air defense be a separate operating system?	No! Make air defense a subfunction of Operational Protection.
	Should there be a separate function for command, control, communications countermeasures?	Yes! Make C^3 CM a first order function under Operational Command and Control.
Definitions	Are the definitions for the six Operational Level Blueprint operating systems approved?	Yes! Approved definitions are in the Blueprint Pam.
	Is the design of the Operational Blueprint as joint and combined, as well as Army, appropriate?	Yes! Retain joint and combined nature of Operational Blueprint.
	What should be the terminology, acronyms, and definitions for operating systems at three levels?	Simply use "operating systems" as terminology for all levels but no acronyms; except continue to use BOS at tactical level. Approved definitions describing each set of operating systems are in the Pam.

Table 13

Strategic Blueprint Issues Summary

Type Issue	Issue Description	Decision
Blueprint Structure	Should the Strategic Level Blueprint be developed in two parts showing the strategic functions performed in a theater separate from national military strategic functions?	Yes! Develop two sets of operating systems with subfunctions.
	Do the strategic level operating systems correctly reflect the major national military and theater strategic functions?	Yes! See the Strategic Bleuprint for these operating systems.
	Should the theater strategic operating systems be separate from the Operational Blueprint operating systems or combined?	Yes! Keep separate.
	Should name of the Sustainment operating system (national military) be changed to Logistics?	No! Retainment Sustainment.
	Should National Military Strategic Fires be retained as an operating system?	Yes! Retain the operating system.
	Should Blueprint of the Battlefield be published as TRADOC Pam or HQDA Pam?	Publish as HQDA Pam for worldwide distribution.
	Does the Blueprint apply only to Army or also to Joint Staff and other Services?	Blueprint is of interest throughout the Army, Joint Staff and other Services. Submit to Joint Staff.
	Do CINCs operate primarily at the strategic level but can operate at the operational level of war?	Yes! Primarily strategic but can be at operational level.
	Should LIC be integrated into Blueprint Pam or a separate LIC Blueprint developed?	Integrate LIC into Blueprint Pam. No separate LIC BLueprint.

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FM 1-112	Attack Helicopter Battalion
FM 1-113	Assault Helicopter Battalion
FM 1-114	Regimental Aviation Squadron
FM 1-116	Air Cavalry Troop
FM 3-3	NBC Contamination Avoidance
FM 3-4	NBC Protection
FM 3-5	NBC Decontamination
FM 3-50	Deliberate Smoke Operations
FM 3-100	NBC Operations
FM 3-101	Chemical Staffs and Units
FM 5-100	Engineer Combat Operations
FM 5-101	Mobility
FM 5-102	Countermobility
FM 5-103	Survivability.
FM 5-104	General Engineering
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JCS Pub 5-00.2	Joint Task Force (JTF) Planning Guidance and Procedures (TEST PUB)
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Appendix A

Blueprint for the Strategic Level of War

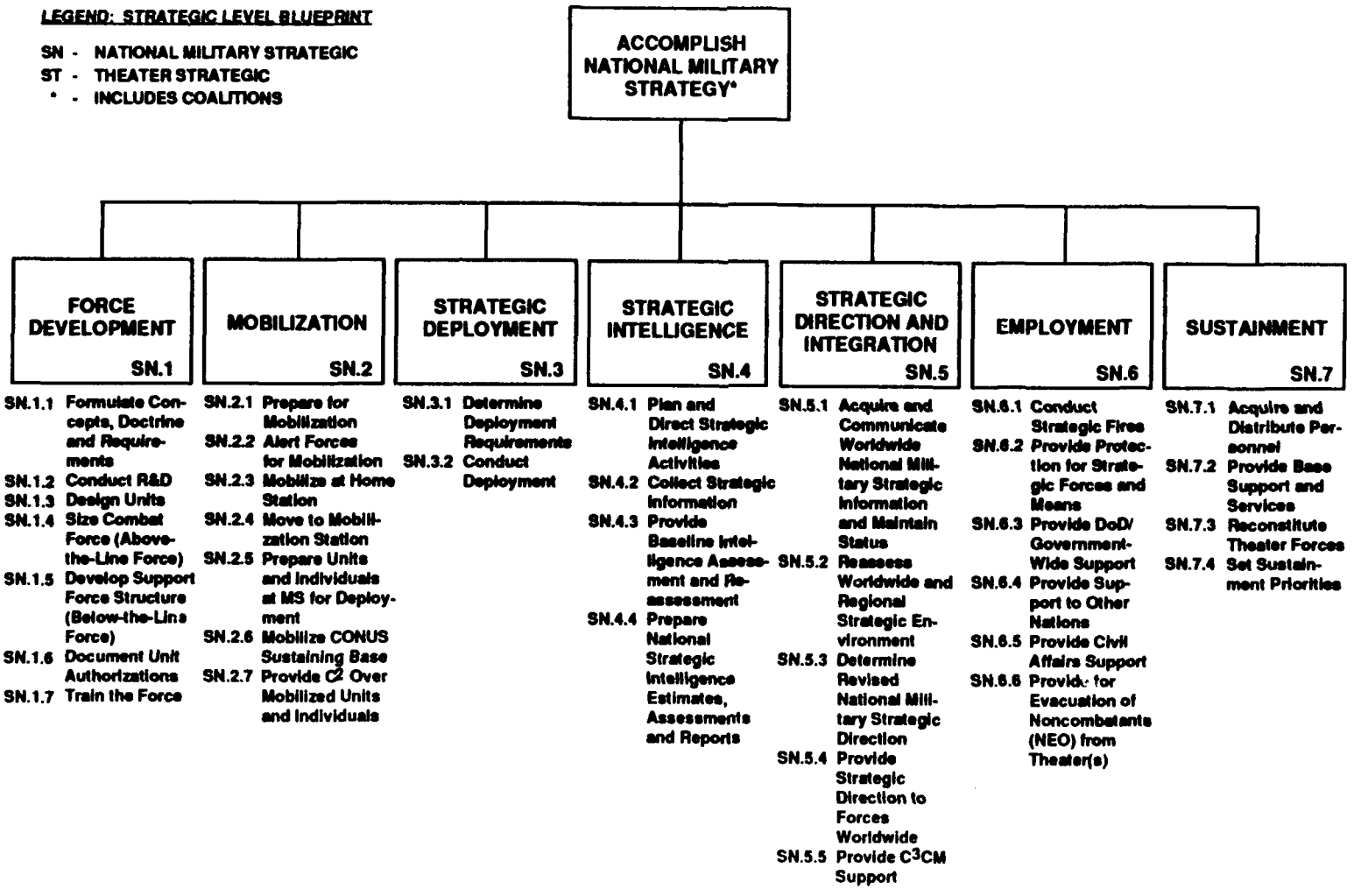
This appendix lists and defines the operating systems for the Strategic Level of War Blueprint of the Battlefield and its associated subfunctions. The strategic Level Blueprint is organized in two parts which describe functions for the military portion of the strategic level of war. Those functions or activities pertaining to the elements of national power other than the military element are beyond the scope of the Strategic Blueprint.

Part 1 describes operating systems and their functions associated with the national military strategic portion of the strategic level. Part 2 describes operating systems and their functions associated with the theater strategic portion of the strategic level. Individual index numbers are assigned to each strategic operating system and associated subfunctions.

SN - National Military Strategic
ST - Theater Strategic

The figure on the next page summarizes the seven operating systems for Part 1 (National Military) for the user's ready reference. A similar figure summarizes the eight operating systems for Part 2 (Theater Strategic) immediately following Part 1 definitions.

BLUEPRINT FOR THE STRATEGIC LEVEL OF WAR
PART 1: NATIONAL MILITARY - SUMMARY



Appendix A

Blueprint for the Strategic Level of War

Part 1: National Military

Section I. SN.1. Force Development

SN.1. Force Development. The translation of projected military department and Service resources - manpower, fiscal, and materiel -into time-phased programs and structure (expressed in dollars, equipment, and units) necessary to accomplish alliance, national security, and national military strategy and Service assigned missions and functions.

Note: The actual acquisition of personnel, materiel, facilities and services is covered in the Sustainment operating system.

SN.1.1 Formulate Concepts, Doctrine and Requirements. To use a methodology which, in light of guidance, the threat, technology, and projected capabilities, develops joint and Service doctrine and concepts, and utilizes future warfighting concepts to develop joint and Service warfighting needs consisting of deficiencies, opportunities for improvement, and preplanned modernization needs to develop potential solutions and an assessment of cost benefits to state prioritized requirements. This function includes development of unified and combined concepts, doctrine and requirements. The methodology should provide bottom-up feedback on doctrine, concepts and requirements. These requirements are the basis for R & D.

SN.1.1.1 Provide Guidance. To derive top-down planning guidance from various high level authorities to form joint and Service guidance concerning priorities, warfighting concerns, and areas of emphasis for doctrine, training, leader development, organizations, and materiel. It may include guidance to direct concept development efforts toward particular objectives; it includes a summary of warfighting concepts.

SN.1.1.2 Develop Warfighting Concepts. To describe what is to be done on the future battlefield and provide realistic, feasible projections of combat considering historical perspective, existing doctrine, current capabilities, future threats, and new technologies across the operational continuum and provide detailed descriptions of battlefield outcomes. Warfighting concepts describe specific capabilities for branch concepts and systems concepts.

SN.1.1.3 Determine Needs and Solutions. To determine warfighting needs (i.e., deficiencies, opportunities, and

obsolescence issues) and to develop solution sets and to prioritize solutions based on military judgment, cost-benefit analyses and trade-off considerations.

SN.1.1.4 Document Requirements and Solutions. To develop joint and Service/branch warfighting needs categorized in a common functional battlefield hierarchical structure and to consolidate, integrate, and prioritize these capability issues using this same structure into a plan articulating needs. Subsequently, to review, evaluate, and integrate solutions into groupings of related aspects of the battlefield and to prioritize these solutions into modernization plans.

Note: The Blueprint of the Battlefield (three levels) provides such a structure.

SN.1.2 Conduct R & D. To conduct study and experimentation directed toward increasing knowledge and understanding in those fields that are related to national security needs and provide fundamental knowledge for solution of identified military problems or exploratory and advanced developments in technologies of new or improved military functional capabilities and to perform tests and evaluation of test results.

SN.1.3 Design Units. To develop new or revised joint and Service organizations, or design unit models, in response to an approved requirement. To prescribe the mission, organization, and equipment requirements, frequently tied to new developments in doctrine, tactics, equipment modernization, and mission changes.

SN.1.3.1 Develop Unit Reference Sheet Organizations. To develop hard copy organizational reference sheets which depict personnel strengths and major items of equipment with unit capabilities and limitations inherent in the concept for the unit and imposed constraints and restrictions.

SN.1.3.2 Develop Qualitative and Quantitative Equipment and Personnel Requirements Information. To provide personnel and equipment changes required to introduce new/modified items into the inventory and to determine the need to develop or revise military and civilian occupational specialties and to prepare plans for the personnel and training needed to operate and maintain the new or improved items.

SN.1.3.3 Develop TOE. To prescribe the required structure, manpower, and equipment for several organizational options for a particular type unit. To provide a model for fielding a unit at full capability or at a reduced capability if resource constraints so mandate. It specifies the normal tasks the unit is designed to perform and the capabilities the unit has to accomplish its mission.

SN.1.3.4 Integrate Unit Design. To develop unit designs jointly with other Services, combatant commands, Joint Staff and among elements of own Service.

SN.1.4 Size Combat Force (Above-the-Line Force). To determine the size of the major combat formations of each Service individually and as a whole (and where appropriate allies), based on consideration of the national security strategy, defense planning guidance, the national military strategy and other policy guidance, the threat, and resource constraints.

SN.1.4.1 Develop Risk Evaluation Force. To translate defense objectives and policies, and force structure recommendations from the CINCs and JCS, into that force necessary to achieve US national military objectives with reasonable assurance of success. This force is for use as a theoretical yardstick for measuring the relative risk of other force levels (notably the programmed force). The risk evaluation force describes a fully structured, manned, trained, and supported force based on force structures recommended by the CINCs and JCS. The Chairman JCS ultimately determines the level of acceptable risk and risk evaluation force in consultation with members of the JCS and the CINCs for inclusion in the Chairman's Guidance. The risk evaluation force is part of the Joint Strategy Review (JSR) that initiates the strategic planning cycle.

SN.1.4.2 Conduct Objective (Constrained) Force Planning. To develop constrained macro-force alternatives attainable within the program period and developed preferred force alternatives. Services working with the components and the Joint Staff working with the theater commanders and the Services provide this analysis to CJCS.

SN.1.4.3 Determine Force for Program. To select the objective force from the preferred alternatives and provide the optimum mid-and long-range force levels to guide program and extended planning period developments within projected resources constraints. This force identifies major formations (e.g., specific number of Army divisions, separate brigades, ACRs, special forces groups) which are the start point for determining below-the line-forces (CS, CSS). Military departments provide this analysis working with their MACOMs.

SN.1.5 Develop Support Force Structure (Below-the-Line Force). To conduct qualitative and quantitative analysis based on defense planning scenarios to generate tactical support forces and general purpose forces necessary worldwide to sustain and support the divisional and nondivisional combat forces designated in the objective force.

SN.1.5.1 Determine Global and Theater Support Force Requirements. To determine the achievable manning, equipment, and modernization levels for the major combat formations

established in the objective force required to support (CS and CSS) those combat formations worldwide for the program and those currently in existence, or scheduled to exist, for the budget. Analyses are normally separate for the programmed force and for the budgeted force; analyses are quantitative and subjective.

SN.1.5.2 Match Requirements to Available Forces. To analyze the program force, or the readiness of the budget force, including structured support forces to determine shortfalls in units (CS, and CSS) and workload capability of those units in the total force worldwide. It includes the total shortages of personnel by specialty by command and the total force worldwide.

SN.1.5.3 Conduct Trade-Offs and Prioritizations. To determine the expenditures of resources (dollars, personnel, materiel, programs, etc.) to correct deficiencies in the program, budget and current force based upon available analysis through trade-offs and setting priorities and document the risks.

SN.1.5.4 Integrate Forces. To determine the executability of all aspects of the base force derived for preparing each Service's program. This functions addresses in detail such questions as the ability to equip, man, train, provide training ammunition, and sustain the force, provide facilities, and execute strategy guidance, etc.

SN.1.6 Document Unit Authorizations. To develop authorization documents which integrate the products of the force design and force structuring functions. Force design is documented in TOEs; and force structuring documents how many of each required increment of military capability the nation, and the military departments, can afford to buy and maintain. The later system tracks changes in the force as the departments move forward with their equipment modernization program and new doctrines and organizations evolve. This function includes developing automated information systems to facilitate the recording, maintaining, and retrieving data necessary for force structuring, force planning, and accounting of all units of the Active and Reserve Components, and unmanned components, and the distribution of equipment and personnel. It also includes an authoritative record of force structure decisions, the TOE system, and basis of issue system.

SN.1.7 Train the Force. To prepare soldiers, leaders, and units to fight and win in combat at every echelon as combined arms unified, Service, joint and combined forces. This function is applicable to providing fully trained military manpower and units to combatant commands in either a mobilization or nonmobilization conflict.

SN.1.7.1 Establish Mission Essential Task List (METL). To analyze applicable tasks contained in war plans and external directives and select for training only those tasks which are

essential to accomplish the organization's wartime mission, and subsequently to select battle tasks. To establish supporting standards and conditions for each task in the METL for collective (combined arms Service and joint), individual, and leader training.

SN.1.7.2 Establish Training Programs. To link organizational METL with the subsequent execution and evaluation of training. Training planning develops mutually supporting METL-based training at all levels within an organization. This function includes: conducting a training assessment of proficiency (current vs desired); articulating a training vision; issuing training guidance; performing time management; establishing training events; allocating training resources. Planning is long-range, mid-range, and near-term.

SN.1.7.3 Conduct Training. To provide adequate preparation, effective presentation and practice, and thorough evaluation of collective and individual tasks being executed.

SN.1.7.4 Assess Training Effectiveness. To conduct an evaluation of training to measure the demonstrated ability of individuals, leaders, and units against specified training standards. This function includes after action reviews, feedback, and organizational assessments.

Section II. SN.2 Mobilization

SN.2. Mobilization. The act of assembling and organizing national resources to support national objectives in time of war or other emergencies. For the Strategic Blueprint it is the function(s) by which the Armed Forces or part of them are brought to a state of readiness for war or other national emergency. It includes activating all or part of the Reserve Components (RC) as well as assembling and organizing personnel, supplies, and materiel.

This operating system is applicable only when the NCA has executed any one of five actions across the mobilization spectrum (i.e., selective, presidential call-up, partial, full, or total mobilization) except for preparatory functions shown in SN.2.1 and SN.2.2 below. This operating system basically pertains to activities for expanding the force. For non-mobilization situations refer to other operating systems in the Blueprint.

Note: Mobilization functions of component commands are analyzed under this operating system. For example, the U S Army WESTCOM, a component command of USPACOM, has mobilization responsibilities. These mobilization responsibilities are analyzed under this national military operating system (rather than a theater strategic function), because WESTCOM performs these responsibilities as an Army MACOM. Thus WESTCOM is considered performing national military functions. However, WESTCOM does report mobilization status through the combatant command. Also, CINCFORSCOM has major mobilization responsibilities analyzed here.

SN.2.1 Prepare for Mobilization. To plan, train and prepare to accomplish assigned mobilization missions; prepare mobilization plans, data and files; coordinate mobilization activities; and conduct mobilization training. To complete as many administrative and processing actions as possible at home stations (HS) before being ordered to Federal active duty. To complete plans for all associated mobilization activities.

SN.2.1.1 Develop and Evaluate Installation Plans, Policies, Procedures, and Systems for Mobilization. To prepare and exercise detailed installation capability plans based on the Mobilization Troop Basis Station Plan (MTBSP) to support mobilization and deployment requirements to be included in Installation Mobilization Plans and Mobilization Master Plans and to develop systems to support mobilization (e.g., AMOPS, JOPES, WWMCCS, ASIMS, DARMS and other systems). Plans include support and processing units mobilizing at mobilization stations (MS), MOBPERSACS data, activities to support MACOM activities/requirements, to include tenants, operation of service schools and centers (as required), operation of provisions for real property maintenance, new construction, space management, use of State property and nonindustrial facilities, base

expansion, training base expansion, support for CONUS Replacement Center (CRC) operations where applicable, etc.

SN.2.1.2 Develop and Exercise RC Unit and Individual Mobilization Plans. To prepare and execute plans for mobilization of Reserve Component units and individual reservists to include peacetime preparation, alert, mobilization at home station, CRCs and movement to mobilization stations or port of embarkation (POE).

SN.2.1.3 Participate in War Planning to Support Mobilization. To participate with the Joint Staff, other Services and the unified and specified commands in war planning to establish forces and the requirements for their augmentation. Joint planning and execution is accomplished through the Joint Operations Planning and Execution System (JOPES-under development) and the Joint Strategic Planning System (JSPS) resulting in combatant command operation plans (OPLANS). Each OPLAN is supported by a Time-Phased Force and Deployment Data listing of units, non-unit related personnel, and resources required to support the plan. HQDA and CONUS MACOMS interact with the planning process through the mobilization and planning system (e.g., AMOPS for the Army) and component commanders to provide input to the theater commander's OPLAN and thus the Service's requirements for forces and resources. These requirements provide the basis for Service mobilization planning (e.g., MTBSPs) during peacetime deliberate planning and crisis action.

SN.2.1.4 Increase Readiness Of Key Mobilization Personnel. To increase readiness of Active Component (AC) units in theater, in CONUS, or both. To initiate premobilization actions to increase readiness of Reserve Component units and individuals. To augment active forces by ordering to active duty selected reservists.

SN.2.1.5 Maintain Current Operational Readiness Status of Units. To prepare recurring Unit Status Reports (USR) in peacetime and when alerted for mobilization; to determine a unit's status by comparing personnel, equipment and training factors to wartime requirements and by obtaining the commander's overall assessment of the unit. To maintain unit status data in the SORTS data base, a WWMCCS data file that contains the identity of worldwide resources keyed to each unit's identification code.

SN.2.2 Alert Forces for Mobilization. To take specific actions to transition the force from Reserve Component to Active Component status with available personnel, facilities, and emergency activities to complete the administrative and processing actions not previously completed. The Alert phase begins when units or

individuals receive notice of pending order to active duty and ends when the unit enters active Federal service.

SN.2.2.1 Alert Units and Individuals of Pending Mobilization. To provide readiness for action: the period of time during which troops stand by in response to an alarm. Also, any form of communication used by HQDA or other competent authority, to notify national guard and reserve unit commanders that orders to active duty are pending for the units.

SN.2.2.2 Prepare HS and MS/CRC for Reception of Activated Units/Individuals. To screen records, notify finance input station of unit status, prepare for activities at home station (HS), review Postmobilization Training Support Requirements (PTSR), inventory unit property, coordinate retrieval of equipment, verify billeting and subsistence support, finalize supply and equipment shortages, etc.

SN.2.2.3 Activate Key Personnel. To order key personnel to duty.

SN.2.2.4 Conduct Preparatory Administrative, Logistics and Readiness Activities. To begin activities required at mobilization (e.g., the PTSR, command readiness inspection reports, operational test and evaluations, 1-R reports, the unit commander's METL, and informal evaluation and observations for determining unit training shortfalls).

SN.2.3 Mobilize at Home Station. To bring units to active Federal duty, transition those units to AC status, and prepare them for departure for their mobilization station.

SN.2.3.1 Assemble Forces and Report Status. To assemble unit members and resources at home station and provide status of personnel, equipment and training readiness, and readiness to move to MS.

SN.2.3.2 Conduct Specified Training. To train personnel and units on designated subjects and to correct URS training deficiencies and also to begin training to be conducted at MS. To analyze the training function see 1.6 Train the Force.

SN.2.3.3 Requisition MS Training and Support Requirements. To review and request mobilization stations training, training ammunition, and MS support requirements.

SN.2.3.4 Transfer HS Property. To complete inventory and to turn over facilities and equipment not accompanying unit to MS.

SN.2.3.5 Inspect and Prepare for Movement to MS. To conduct a showdown inspection and put units in a state of readiness for movement to mobilization station.

SN.2.4 Move to Mobilization Station. To move or transport a unit and its equipment from HS to MS by any transportation mode or means.

SN.2.4.1 Provide Movement Requirements. To provide transportation requirements beyond organic capabilities to move to the mobilization station.

SN.2.4.2 Develop Movement Plans from HS to MS (or POE). To prepare plans, including loading plans, routes, convoy organization, C2, guides, advance parties, etc. for movement by any mode to MS.

SN.2.4.3 Provide Transportation for Mobilized Units. To provide mobilized units the required transportation, common carrier or organic, to move to MS.

SN.2.4.4 Provide Mobilization Movements Control. To collect, analyze and deconflict convoy movements and to provide a system to prioritize use of roadways. To establish a point of contact at each state for information management and coordination. It also provides a mechanism to coordinate priority movements with Federal and civil agencies.

SN.2.5 Prepare Units and Individuals at MS for Deployment. To determine the operational readiness of a unit, validate the unit for deployment, and to take necessary action to correct shortages and deficiencies in training, manning levels and equipment. It includes marshalling RC units (RCU), preparing vehicles and equipment (weighing, marking, tiedown, inspection, etc.) for deployment. It includes processing Non-unit related personnel for overseas movement.

SN.2.5.1 Receive and Provide Base and Operations Support for Units and Individuals. To in/out process RCU, retirees and IRR fillers and provide base operations, POR/POM processing, training, ammunition, reports, coordination/control for deployment, and other support (e.g., ADP, JAG, health services, chaplain, finance).

SN.2.5.2 Validate RC Units for Deployment. To evaluate all deploying Active and Reserve component units in the areas of personnel, logistics and training. It is a last minute check to determine the unit's capability to perform its assigned wartime (CAPSTONE) mission when it is scheduled to deploy.

SN.2.5.3 Cross-Level and Redistribute Personnel and Equipment. To reallocate or reassign personnel, or effect transfer in control, utilization, or location of materiel at an installation, regardless of MACOM, as directed by the installation or between installations as directed by MACOMS to meet minimum readiness validation criteria for deployment of units.

SN.2.5.4 Train Units and Individuals to Minimum Operational Ready/POR Status. To plan and conduct operational readiness training at MS to have all units and personnel ready to deploy. To analyze the training function see 1.6 Train the Force.

SN.2.5.5 Secure Clearance for Deploying Non-Validated Units. To obtain approval of the gaining combatant commander to deploy non-validated units.

SN.2.5.6 Prepare for Deployment. To conduct and be assisted in getting ready for deployment in training, advice and technical assistance in loading, sequencing, securing and documentation of unit equipment, vehicle preparation, marshaling, etc.

SN.2.6 Mobilize CONUS Sustaining Base. To expand the CONUS base so it can support the emergency and mobilization requirements. It consists of those elements which are oriented primarily toward sustaining and reinforcing the theater force. Included are mobilization stations/CONUS Replacement Centers, training base, logistics support, health services support, transportation support, and other support.

SN.2.6.1 Expand Mobilization Stations. To ensure the orderly expansion of posts, camps, and stations and their ability to receive, house, supply, train and deploy units.

SN.2.6.2 Expand Training Base. To expand the training base support element to ensure the orderly and timely availability of trained manpower to mobilize for CONUS Base Support and Theater Force requirements. It includes induction centers, reception centers, training centers, schools, reserve augmentation. This function pertains to the expansion of the training base; for analyzing the training function see 1.7 Train the Force.

SN.2.6.3 Expand Logistics Support. To expand the logistics support element to provide logistical support to meet mobilization and deployment/employment requirements of the total force. It includes maintenance systems, facilities (e.g., army production base, national industrial base, military construction), supply (storage, handling, procurement, production capability) and troop service support.

SN.2.6.4 Expand the Health Service Support Element. To expand essential health services including but not limited to medical, dental, optometric, veterinary and preventive medical support. Health service support would be provided in Army hospitals, VA hospitals, and civilian hospitals (in that order). Medical treatment facilities will be expanded and new ones developed from existing or new construction according to plans. Patient population distribution will be based on a number of factors (e.g., projected casualties, troop strength, medical evacuation policy, etc.).

SN.2.6.5 Expand Transportation Support System. To increase the transportation system capability to move the total force (units and materiel) within CONUS and to/from overseas commands. The functions include traffic management (CONUS land transportation, common-user ocean terminals and intermodal movement), operating and managing common-user ocean shipping and port authorities, and the worldwide operation of common-user airlift resources and aerial ports.

SN.2.6.6 Expand Other Support. To increase other support requirements in accordance with the expansion of the force, e.g., family assistance, legal, ADP, security/law enforcement, chaplain, finance.

SN.2.7 Provide Command and Control over Mobilized Units and Individuals. To provide C2 over mobilized forces from the time they are called to active duty until the time they depart their mobilization station or CRC. This function includes providing the necessary communications to support C2. This function includes the transitioning of C2 from premobilization to postmobilization for any level of mobilization. See the Strategic Direction and Integration operating system for subfunctions applicable to analyzing this function.

Note: RC units are assigned to a designated major command when mobilized at HS. Command of RC unit passes to MS commander (tenant major command activities in the case of nondeploying units) when unit reports to MS.

Section III. SN.3. Strategic Deployment

SN.3. Strategic Deployment. The relocation of forces to desired theaters in accordance with national military strategy and OPLANS. It focuses on the intertheater movement of forces and resources using national strategic mobility capabilities.

National Military Strategic Deployment encompasses movements from point of origin through destination, including intermediate locations specifically intra-CONUS, intertheater, and intratheater movement legs to staging and holding areas. Subsequent intratheater movement is covered in Part 2 as a theater function. The Strategic Deployment operating system is applicable for mobilization and nonmobilization situations.

SN.3.1 Determine Deployment Requirements. To identify demands on common-user and organic lift assets and en route support required to move forces to theaters in support of national military and theater strategies, operational plans, alliance and regional needs. Deployment planning would be considered under Strategic Direction and Integration.

SN.3.1.1 Determine Forces and Cargo to be Deployed. To identify types and/or actual units, personnel replacements, and cargo required to support the combatant commands; includes identifying origin and ports of debarkation or ocean area.

SN.3.1.2 Estimate Available Transportation. To examine, as a minimum, installation outloading capability, port throughput, transit times, overflight and landing rights, en route support facilities, and critical common-user lift asset availability.

SN.3.1.3 Coordinate and Match Transportation Resources and Requirements. To compare required deployment movements against the actual strategic lift assets made available. If a change in the allocation is required, the supported combatant command, in coordination with USTRANSCOM, will request additional transportation allocation from the Joint Chiefs of Staff.

SN.3.1.4 Determine Possible Closure Times. To determine the arrival date of a specified movement requirement at port of debarkation (POD).

This function includes the conduct of a detailed, integrated air, land, and sea transportation analysis to determine the transportation feasibility of the course of action. Utilizing common-user lift assets apportioned for planning and supporting commands deployment estimates for organic movements, ... USTRANSCOM will evaluate the capability to deploy the force

within the transportation priorities established by the supported command. Services and components will also provide an estimate of the ability of support and augmentation forces deploying with organic transportation assets to meet the required timing for the selected COA.

SN.3.1.5 Provide for En Route Support and Clearances. To provide support, diplomatic clearances and overflight rights of countries affected for forces which are in transit from one locality to another. Many strategic deployments need intermediate staging area stops for refueling, regrouping of ships, replenishment, exercise, inspection, and concentration or redistribution of troops. May often require airfields and facilities, e.g., navigation aids, communications, maintenance and servicing facilities, augmentation support, parking and throughput facilities, construction, health services, berths, beaches, stevedores, utilities, etc.

SN.3.1.6 Determine Impact of Threat and Geography on Deployment. Note: See intelligence operating system SN.4 to analyze the impact of threat and geography on deployment.

SN.3.2 Conduct Deployment. To move forces and cargo in accordance with national military strategic plans, OPLANS and combatant commander's requirements.

SN.3.2.1 Integrate Deployment Systems. To combine common-user, augmentation and self-deploying lift assets of deploying forces, through movements control and deployment-related ADP systems and en route support into a centralized traffic management plan for worldwide strategic mobility operations. The Global Transportation Network (GTN), now being developed by USTRANSCOM, incorporates ADP and other deployment systems for this integration.

SN.3.2.2 Provide Forces and Mobility Assets. To provide the transportation assets in an operational configuration for the movement of forces and sustainment resources. Mobility assets here include military and commercial means pertinent to either mobilization or nonmobilization situations.

SN.3.2.3 Provide Terminal Operations. To provide reception, processing, and staging of passengers, the receipt, transit storage and marshalling of cargo, the loading and unloading of ships or aircraft, and the manifesting and forwarding of cargo and passengers to destination.

SN.3.2.4 Provide Movement to POE and Port Support Services. To move forces, individuals and equipment/supplies from origin installation or mobilization station if used to marshaling area and then to ports of embarkation.

SN.3.2.5 Move Forces from POE (or Start Point) to POD. To move forces by air and sea strategic mobility assets to ports of debarkation in theaters.

SN.3.2.6 Provide Movement from POD, Reception and Onward Movement Services. To provide air and sea port reception services in theaters, provide onward movement to holding and staging areas.

SN.3.2.7 Provide Command and Control of Deploying Units. To provide for authority and direction of mobilized units as they transit through the phases of deployment to the point they come under the C2 of a combatant commander.

Note: For analysis of this function refer to the Direction and Integration operating system.

SN.3.2.8 Support Theater Noncombatant Evacuation Operations (NEO). To evacuate U S and other designated personnel from theaters or areas of war or operations, often in back-haul of mobility assets during strategic deployment operations. See SN.6.6 for analyzing NEO.

Section IV. SN.4 Strategic Intelligence

SN.4. Strategic Intelligence. That intelligence required for the formation of policy and military plans at national and international levels and theaters. Strategic intelligence and tactical intelligence (and operational intelligence) differ primarily in level of application but may also vary in terms of scope and detail.

SN.4.1 Plan and Direct Strategic Intelligence Activities. To determine strategic intelligence requirements, plan the collection effort, issue orders and requests to collection agencies and maintain a continuous check on the productivity of the collection agencies. This function includes the continuous review, validation, and prioritization of both requirements and taskings, and monitoring the fulfillment of requirements.

SN.4.1.1 Develop Strategic Intelligence and Targeting Policy. To assist and advise the NCA on the development of policy governing strategic intelligence collection, processing and production. It includes advice on the policy governing the detection, identification, location, military importance, priority, desired level of damage or casualties, limitations and constraints on targets of strategic importance, numbers of nuclear warheads, production of nuclear materials, and nuclear weapons modernization. It includes intelligence planning guidance, major intelligence deficiencies, goals and associated objectives to overcome these deficiencies at the national and combatant command levels.

SN.4.1.2 Determine Strategic Intelligence Requirements. To determine the requirements for intelligence of the NCA, JCS, Services, agencies, combatant commands, operational and tactical commanders.

SN.4.1.3 Identify Key Defense Intelligence Issues. To identify potential issues and situations that could impact on US national security interests and objectives or on US military forces across the operational continuum.

SN.4.1.4 Set Intelligence Priorities for Strategic Planning.
To provide the baseline intelligence threat assessments for developing strategic planning documents to determine the priorities among intelligence requirements required to support joint strategic planning, in particular for collection, production and support requirements for the long-, mid-, and short-range periods.

SN.4.1.5 Distribute Resources and Requirements. To assign, apportion, and allocate intelligence requirements and collection resources to national military and combatant commands for action and request support from national and allied sources.

SN.4.2 Collect Strategic Information. To exploit sources of strategic intelligence by collection agencies and to deliver the information obtained to the appropriate processing organization for use in production of strategic intelligence.

SN.4.2.1 Collect Information on Strategic Situation Worldwide. To obtain information and data from all source means (e.g., HUMINT, IMINT, MASINT and SIGINT; includes US, allied and covert sources) on the strategic, operational, and tactical situation regionally and globally. It includes enemy strategic vulnerabilities, threat strategic forces and strategic center(s) of gravity, the nature and characteristics of theaters and regional areas of interest. Information would include potential issues and situations that could impact on US national security interests and objectives, alliance and regional relations, or on US military forces. It includes analysis of input from combatant commanders on their integrated priorities and assessments of their preparedness and security assistance recommendations, the global national security environment, and counterintelligence and investigative activities.

SN.4.2.2 Collect Information on Strategic Targets. To collect information of strategic importance that supports the detection, identification, and location of enemy centers of gravity (all levels of war) and high payoff targets whose attack will lead directly or indirectly to the defeat of the enemy. This includes strategic nuclear and conventional targeting.

SN.4.2.3 Support Theater Intelligence Needs. To collect information which supports the development of theater strategy, campaigns, and major operations. Senior commanders in theaters at the strategic, operational and tactical levels rely on information available only from national intelligence collection means or acquired from other combatant commands. Damage assessment is included under this function.

SN.4.2.4 Collect Information on Topography/Mapping, Charting and Geodesy. To plan, direct and coordinate military geographic information and documentation activities.

SN.4.3 Provide Baseline Intelligence Assessment and Reassessment. To assess the threat worldwide and regionally in support of joint national military strategy reviews. It includes converting all-source information into strategic intelligence through collation, evaluation, analysis, integration and interpretation .

SN.4.3.1 Assess Global and Regional Issues and Threats. To make a detailed assessment of threats to the US and its military forces associated with terrorism, low-intensity conflict, regional crises and security issues, and global war. It includes assessing potential issues and situations that could impact US national security interests and objectives.

SN.4.3.2 Assess Strategic Vulnerabilities. To determine the susceptibility of vital elements of national power to being seriously decreased or adversely changed by the application of actions within the capability of another nation to impose. Strategic vulnerabilities may pertain to political, geographic, economic, scientific, sociological, or military factors. It includes friendly vulnerability to enemy strategic deception.

SN.4.3.3 Analyze Areas of Interest Regionally and Worldwide. To assess CINC areas of responsibility in order of established US national priorities.

SN.4.3.4 Integrate All-Source Strategic Intelligence. To identify or form a pattern through the selection and combination of evaluated strategic information.

SN.4.3.5 Develop National Strategic Indications and Warning of Threat Worldwide. To provide strategic intelligence activities intended to detect and report time-sensitive intelligence information on foreign developments that could involve a threat to the US or allied military political, or economic interests or to US citizens abroad. It includes forewarning of enemy actions or intentions; nuclear/non-nuclear attack on the US, its overseas forces, or allied nations; hostile reactions to US reconnaissance activities; terrorists' attacks; and other similar events.

SN.4.4 Prepare National Strategic Intelligence Estimates, Assessments and Reports. To convey in a timely way strategic intelligence, in an appropriate form and by any suitable means, to those who need it.

Note: This function is applicable to function 5.1.1 Communicate Strategic Information (for dissemination of national military strategic intelligence) in the Strategic Direction and Integration operating system.

Section V. SN.5 Strategic Direction and Integration

SN.5. Strategic Direction and Integration. The guidance expressed through revised national (and alliance) military strategy, derived from national security strategy, relative to the attainment of strategic goals and objectives. The CJCS (and the Service chiefs) receive strategic direction from national security strategy and policy directives. In turn, the Secretary of Defense, through the CJCS, provides guidance and direction to the CINCs who subsequently provide direction for the employment of unified, joint, Service, supporting and combined forces through his theater strategy. These three strategies (and related strategic plans) integrate the national ends, ways and means.

SN.5.1 Acquire and Communicate Worldwide National Military Strategic Information and Maintain Status. To gain possession of information and data on the strategic situation worldwide on the following: combatant command, theater component command, and operational level command missions, friendly forces, enemy forces and strategic centers of gravity, characteristics of the theaters' areas (worldwide), to translate that information into usable form, to retain, and to disseminate it. It includes informing and advising, and securing an understanding from, the National Command Authorities and national security council advisory staff, Chairman JCS, Service Departments and Staffs, combined chiefs of coalitions, other elements of the Department of Defense and governmental agencies, on the worldwide situation, national security and national military strategies, and theater strategies and campaigns. This function includes interfacing with friendly civilian government authorities, as required. Basically, this function pertains to information and data of a strategic nature or importance for every function in the Blueprint.

SN.5.1.1 Communicate Strategic Information. To send and receive strategically significant data from one echelon of command, component, military department, etc. to another by any means.

SN.5.1.2 Manage National Military C3 Systems Worldwide for Communicating Strategic Information. To direct, establish, or control the means used in sending or receiving strategic information (includes data), and to use communication networks and modes for obtaining or sending strategic information.

Note: This function includes requirements for command, control, and communications systems to operate within the Worldwide Military Command and Control System, the National Military Command System, the Joint Operational Planning and Execution System, theater systems, the Service command and control system, or similar systems that may be established or required.

SN.5.1.3 Maintain Global Strategic Military Information and Force Status. To screen, circulate, store, and display data of strategic significance in a form suitable for the decision making process of the ACCS, NMCS and theater C2 system.

SN.5.1.4 Monitor Worldwide Strategic Situation. To be aware of and to understand events regionally and globally in the context of national and alliance security and military strategies and other elements of national power (e.g., political, economic, informational.

SN.5.2 Reassess Worldwide and Regional Strategic Environment. To provide assessments on the global strategic environment and situation, the capabilities of the US Armed Forces and its allies as compared with those of their potential adversaries in a worldwide and regional context. To conduct a review of the current national military strategy, forces and the global family of operations plans. In particular, it includes deciding whether different actions are required from those that would result from the most recent orders. This includes reassessing the national military strategy, plans, determine own strategic center(s) of gravity, etc.

SN.5.2.1 Conduct Joint Military Net Assessments. To perform a comprehensive net assessment of the defense capabilities and programs of the Armed Forces of the United States and its allies as compared with those of their potential adversaries. This function includes the Joint military Net Assessment, Chairman's Net Assessment for Strategic Planning and Chairman's Program Assessment.

SN.5.2.2 Conduct National Military Strategy Review. To review the strategic situation and strategy by gathering information, raising issues, and facilitating the integration of strategy, operational planning, and program assessments to support the formulation of subsequent guidance for, and development of, a statement of the national military strategy. It includes: review of the objectives, concept, and resources associated with existing national military strategy, planning guidance and national security documents and related issues; a baseline intelligence threat assessment; input on priorities and preparedness from unified commanders; changes to the global national security environment; evaluation of the risk associated with various force levels for planning.

Note: The national military strategy is a given for the National Military part of the Strategic Level Blueprint; however, this function refers to reviewing, or reassessing, the strategy.

SN.5.2.3 Review Global Operations Plans. To reexamine all existing strategic and operations plans in the light of the existing global strategic environment and the results of the national military strategy review to ensure compliance with

existing NCA guidance and resource levels and developing issues which might suggest changes to the strategy or war plans.

SN.5.2.4 Decide on Need for Action or Change. To decide whether actions are required strategically which are different from those which Service forces have already been directed to support.

SN.5.3 Determine Revised National Military Strategic Direction. To conduct the process of assimilating various estimates, reviews, and NCA guidance and developing options and decisions on alliance and the national military strategy recommendation to the NCA and on supporting theater strategies and campaign plans.

SN.5.3.1 Issue Planning Guidance. To provide guidance for Service staffs and Service major command (e.g., Army MACOMs and component commands) planners on goals/objectives, resources, restrictions, constraints, and planning tasks to be accomplished. It includes providing guidance for developing the national military strategy recommendation and for providing Service forces for supporting alliance and theater strategies and campaigns in conformance with OSD planning guidance, Chairman JCS planning guidance, and contingency planning guidance.

SN.5.3.2 Develop and Analyze Alliance and National Military Strategy Options. To anticipate and define multiple, feasible strategic employment and sustainment options within the framework of various superior guidance, to examine or wargame each course of action (each friendly against each enemy) to determine advantages and disadvantages of each, and compare the advantages and disadvantages of each course of action previously examined.

This analysis will be conducted in the context of combined JCS and unilateral Service (e.g., Army) related actions with OSD, OMB, Congress, and the President during PPBS and other activities.

SN.5.3.3 Select or Modify Alliance and National Military Strategy, Plans, and Other Strategic Actions. To decide on the strategic option which offers the best prospect for success, or to modify a course of action previously selected.

SN.5.3.4 Review Strategic Options and Recommendations with NCA, and Other Officials, and Adjust. To review strategic options and recommended strategies or strategic actions with the NCA and JCS (and Congress and foreign government officials, etc., as required) to enable them to make a reasoned decision. To adjust the recommended strategy or action based upon NCA or CJCS guidance.

SN.5.3.5 Set Priorities and Allocate Resources. To set alliance and national military (and Service) priorities and allocate national and Service resources worldwide to combatant

commands based upon NCA/CJCS concept and intent in guidance. This function includes analyzing affordability issues.

SN.5.4 Provide Strategic Direction to Forces Worldwide. To establish a command climate which provides strategic direction to combatant commands, Service departments and their subordinate commands, or Service component (to unified commands) commands such that they understand their mission, their Service role, and the contribution of Service components and forces to attainment of assigned strategic military objectives in the context of the NCA (through CJCS) concept and intent in the national military strategy (and alliance strategy) and that of the unified commanders in theater strategies. It includes maximum decentralized conduct of Service support in the CONUS base or to unified operations, in either crisis action or deliberate contemplative action as the national, global or theater strategic situations dictate.

SN.5.4.1 Prepare and Issue Strategic Estimates, Priorities and War Plans. To develop, and submit for transmission, the plans or directives which executes the concept and intent for worldwide support in the national military strategy and for alliance combatant command strategies and campaigns.

SN.5.4.2 Coordinate Support for Unified and Combined Operations. To coordinate strategic actions with various US military Services, US Service commands, US and Allied governmental, civilian and military officials, and with other National and International Headquarters and Support Agencies.

SN.5.4.3 Synchronize and Manage Global Operations and Resources. To arrange sustainment operations in time, space and purpose to ensure the provision of forces to combatant commands in accordance with the national and alliance military strategy and the unified commander's needs. It includes the vertical integration of functions within each operating system and the horizontal integration of the functions across operating system. This is the function that ensures that all joint and combined resources are efficiently employed to maximize the sum of their effects worldwide beyond the sum of their individual capabilities.

SN.5.5 Provide C3CM Support. To support the integrated joint and combined worldwide use of operations security, military strategic deception, jamming, and physical destruction, supported by strategic intelligence, to deny strategic information, to influence, degrade, or destroy adversary strategic command, control, communications (C3) and strategic intelligence capabilities and to protect friendly strategic C3 against such actions. Employment of C3CM includes two component functions, deny enemy effective C3 of his own forces (also called counter-C3) and protect friendly C3 (also called C3-protection).

Note: Applicable to this function are a number of functions covered elsewhere in the national military part of the Strategic Level Blueprint, e.g., intelligence support for C3CM is covered by the 4. Intelligence operating system.

Section VI. SN.6 Employment

SN.6. Employment. The application of military forces (unified, joint, Service, and combined) worldwide at the strategic military level in a way designed to accomplish the objects of the alliance and national military strategy.

Note: Deployment of unified, joint or combined forces from one theater, or CONUS, to another for executing strategic plans is included under the SN.3 Strategic Deployment operating system. There is no function for conducting strategic maneuver (as in the Soviet Army) in the National Strategic part of the strategic level. Under the UCP, forces would CHOP enroute to the gaining CINC, who would conduct any such strategic maneuver. See ST.5 Intra-Theater Movement and Maneuver.

SN.6.1 Conduct Strategic Fires. To use firepower and forces against one or more of a selected series of enemy targets with the purpose of progressive destruction and disintegration of the enemy's strategic forces, national command and control facilities and other critical targets, his war-making capacity and his will to make war in the execution of the national security and alliance strategy. Examples include the strategic force committed to executing the SIOP, regional nuclear strike plans, and anti-satellite (ASAT). SN.6 Employment links to ST.5 Intra-Theater Strategic Movement and Maneuver, ST.6 Theater Strategic Fires, and ST.7 Theater Strategic Protection

SN.6.1.1 Process Strategic Targets. To acquire and select land, sea, air and space (includes satellites) targets of strategic significance and optimum effect on strategic centers of gravity for attack. It includes assigning, apportioning, or allocating fires resources to attack the selected strategic targets and helping to set strategic targeting policy.

SN.6.1.2 Generate and Disperse Strategic Fires Forces. To notify or alert strategic fires forces, increase their readiness, assemble and/or disperse strategic fires forces in a posture preparatory to attacking targets of strategic importance.

SN.6.1.3 Attack Strategic Targets. To enter into conflict with the enemy to destroy strategic level targets worldwide and in space using lethal and nonlethal means. For the decision to execute strategic fires as part of a national military strategic plan, see the SN.5. Strategic Direction and Integration operating system.

SN.6.1.4 Integrate Strategic Fires. To combine or unify the application of strategic fires from multiple sources on single or multiple targets to deconflict them and maximize their effects.

SN.6.2 Provide Protection for Strategic Forces and Means. To safeguard own strategic centers of gravity, strategic force potential, and CONUS base by reducing or avoiding the effects of enemy strategic level actions. Includes strategic deployment of forces.

SN.6.2.1 Provide Strategic Air and Space Defense. To protect strategic forces and the CONUS base (includes the civil populace and industrial capacity of the nation) from attack by air or space systems.

SN.6.2.2 Provide Protection for Homeland and Strategic Forces and Means. To safeguard strategic forces, critical facilities (political, economic, informational, military), national strategic centers of gravity and force potential by reducing or avoiding the effects of enemy strategic level actions (lethal or nonlethal). It includes hardening or fortifying facilities or construction for forces, removing hazards affecting execution of the national military strategy, and ensuring friendly effective use of electromagnetic spectrum.

SN.6.2.3 Employ Operations Security. To take actions to avoid friendly force indicators associated with planning and executing the national military strategy and other strategic plans from the enemy's perspective and thus protecting friendly strategic intentions. This includes signal security, protection of activities (e.g., patterns) and strategic forces and facilities from observation and surveillance sensors (e.g., satellites).

SN.6.2.4 Conduct Deception in Support of Strategy and War Plans. To manipulate enemy strategic commander's perceptions and expectations into a false picture of reality to conceal friendly strategic actions until it is too late for enemy forces to react effectively. This includes protecting the details of friendly strategic intentions worldwide and regionally, spreading misinformation concerning own strategic intentions, assessing the effect of the strategic deception plan, and insuring that the national and theater deception plans and story are mutually supportive.

SN.6.2.5 Assist Civil Defense. To assist other governmental agencies in the mobilization, organization, and direction of the civil population, designed to minimize by passive measures the effects of enemy action against all aspects of civil life.

SN.6.2.6 Provide Security for Strategic Forces and Means. To enhance freedom of strategic action by reducing friendly vulnerability to hostile acts, influence, or surprise. It includes measures to protect from surprise, observation, detection, interference, espionage, and sabotage.

SN.6.3 Provide DOD/Government-wide Support. To provide specified support to other DOD/Governmental agencies.

SN.6.3.1 Support DOD and Joint Agencies. To provide support of DOD/Joint activities, e.g., OJCS, DCA, DLA, DNA, NDU, and related activities.

SN.6.3.2 Support Other Governmental Agencies. To support non-DOD agencies (e.g., disaster relief, control of civil disturbances, drug enforcement, science and technology base).

SN.6.4 Provide Support to Other Nations. To provide assistance to other nations in support of the national security and national military strategies through foreign military sales, military assistance programs, and other nation building assistance.

SN.6.4.1 Provide Security Assistance. To provide defense articles, military training, and other defense-related services, by grant, credit, or cash sales, in furtherance of national policies and objectives. This includes military assistance programs.

SN.6.4.2 Provide Disaster Relief. To provide assistance before, during, or after hostile action or natural or man-made disasters to reduce the probability of damage, minimize its effects, and initiate recovery. It includes, among other things, providing health service support, communications, shelter, subsistence, water, engineering support, transportation, etc.

SN.6.4.3 Provide Nation Building Assistance. To support and assist in developing other nations, normally in conjunction with the State Department and/or an alliance.

SN.6.5 Provide Civil Affairs Support. To provide for, and to develop policy on activities which embrace the relationship between the military forces and civil authorities and people in a friendly country or area or occupied country or area when military forces are present.

SN.6.6 Provide for Evacuation of Noncombatants (NEO) from Theater(s). To provide for the use of military and civil, including HNS, resources for the evacuation of US forces dependents, US government civilian employees and private citizens. NEO includes providing various support (e.g., health services, transportation, security, etc.) to the noncombatants).

Section VII. SN.7 Sustainment

SN.7. Sustainment. The provision of the ability to maintain the necessary level and duration of military activity to achieve national and alliance objectives. It is the function of providing and maintaining those levels of force, materiel, and consumables necessary to support the national and/or alliance military strategy and promote alliance and regional relations.

SN.7.1 Acquire and Distribute Personnel. To procure officers, warrant officers and enlisted personnel and civilians for the force and to transport them to units and organizations of their Service and other DOD, governmental and non-governmental support agencies according to policy and national military strategy.

SN.7.1.1 Determine Human Resource Requirements. Determine the requirements for, and allocate the resources of, manpower from approved positions in the force structure. This includes determining which requirements will be supported with authorizations ("spaces") by grade and skill level.

SN.7.1.2 Acquire and Supply Personnel. To acquire, train and assign personnel ("faces") to authorized positions in the force structure.

SN.7.1.3 Transport Personnel to Field. Move trained personnel replacements to their unit assignments.

Note: Training is a function of the Force Development operating system (OS) and should be analyzed under that OS.

Note: Also, generating forces (units/organizations) for theaters, which could be considered a sustaining function, is a part of the SN.1 Force Development operating system and should be analyzed under that operating system.

SN.7.2 Provide Base Support and Services. To provide wholesale logistic, administrative, base (CONUS and intermediate with national level support) and other force and individual troop support to CINCs and their theaters. This function includes the acquisition of materiel, facilities and services. This support and services can be provided directly to operational and tactical organizations as well as theater organizations.

SN.7.2.1 Determine Number and Location of Sustainment Bases. To determine, in conjunction with the unified commanders, the lines of support and the location for sustaining bases so as to best support the theater campaign plans and strategy and be consistent with the national military strategy.

SN.7.2.2 Provide Depot Supply and Maintenance. To provide an activity for 1) the receipt, classification, storage, accounting issue, maintenance, procurement, manufacture,

assembly, research, salvage or disposal of material, and wholesale distribution of supplies and equipment to supported retail echelons of supply and to collateral depot maintenance activities; and 2) the maintenance performed on materiel requiring major overhaul or a complete rebuild of parts, assemblies, subassemblies, and end-items, including the manufacture of parts, modifications, testing, and reclamation as required. Depot maintenance supports lower categories of maintenance by providing technical assistance and performing that maintenance beyond their responsibility and capability.

SN.7.2.3 Control National Inventories and Movements. To integrate materiel inventory management of all groups of items within the overall supply system and to manage the administrative movement of personnel and materiel from the CONUS base to a combatant command.

SN.7.2.4 Provide CONUS Base and Facilities Development. To improve or expand the resources and facilities of an area or a location in CONUS to support the national military strategy.

SN.7.2.5 Provide Base Operations Support. To provide administrative and logistical services to include, at the local level, supply operations, maintenance of materiel, personnel support, base services to include transportation and electronic (signal) communications, operation of utilities, maintenance of real property, minor construction, mapping, charting and geodesy support, other engineering support and administrative services (including ADP support) rendered by or through activities of the supporting installation.

SN.7.2.6 Provide Personnel Management and Morale Support. To provide for the management of military personnel and the civilian work force in planning, organizing, directing, coordinating, and controlling the procurement, training/education, utilization, separation/retirement, development, and motivation of military and civilian personnel for the successful accomplishment of the national military strategy. To produce and provide the entertainment and recreational facilities and activities for troops including motion pictures, libraries, sports, live entertainment shows, service clubs, musical entertainment, crafts, and outdoor recreation. This function includes providing resources, facilities and support to CONUS and OCONUS commands for morale, welfare, and recreation activities, especially rest and relaxation for service men and women from the rigors of sustained combat and support operations.

SN.7.2.7 Provide Religious Support. To perform and provide religious support to soldiers including worship services, sacraments, rites, and ordinances, pastoral care and counseling, memorial ceremonies, funerals, and advice on moral and ethical issues.

SN.7.2.8 Provide Health Services. To perform, provide, or arrange for, in support of the Army in the field and regardless of location, services which promote, improve, conserve, or restore the mental or physical well-being of individuals or groups. It includes, but is not limited to, preventive, curative, and restorative health measures; medical department doctrine, health related research, transportation of the sick and wounded, selection of the medically fit and disposition of the medically unfit; medical supply and maintenance, and medical, dental, veterinary, laboratory, and optical services.

SN.7.2.9 Provide Management Headquarters. To provide headquarters primarily concerned with long-range planning, programming, and budgeting of resources; the development of policy and procedures; coordination of effort, and evaluation. This activity relates to the operation of departmental and MACOM level headquarters and provision of certain administrative services for activities at the seat of government.

SN.7.2.10 Provide Legal Support, Military Justice and Prisoner Control. To provide advice to commanders and staff; to provide legal assistance and advice to military personnel and their family members; to oversee administration of military justice and advice on detention and handling of enemy POWs; and to provide for confinement of military personnel so ordered and to confine enemy POWs.

SN.7.3 Reconstitute Theater Forces. To assist CINCs in restoring combat-attrited formations and theater support, beyond the CINC's ability to do so from his existing resources, to a desired level of combat effectiveness commensurate with strategy requirements and availability of resources globally or to disestablish the formations and redistribute personnel and equipment among the force.

Note: Reconstitution is normally an internal theater command function; this function refers to the responsibility of the CONUS base in assisting the CINC in carrying out his own responsibilities. Individual or unit rotation to and from a theater could be considered in this function. Mobilization and deployment are supporting operating system. Reconstitution is more than just logistics.

SN.7.3.1 Reorganize Forces. To restore order in a major formation after a major battle or campaign by shifting worldwide resources when the unified commander's ability to shift internal resources are insufficient for replacing casualties, reassigning men/women, if necessary, replenishing ammunition, fuel, other supplies and end items, in order to continue or start a new campaign in his theater in executing the national military strategy. Reorganization is normally done at unit level within a combatant command not requiring outside assistance.

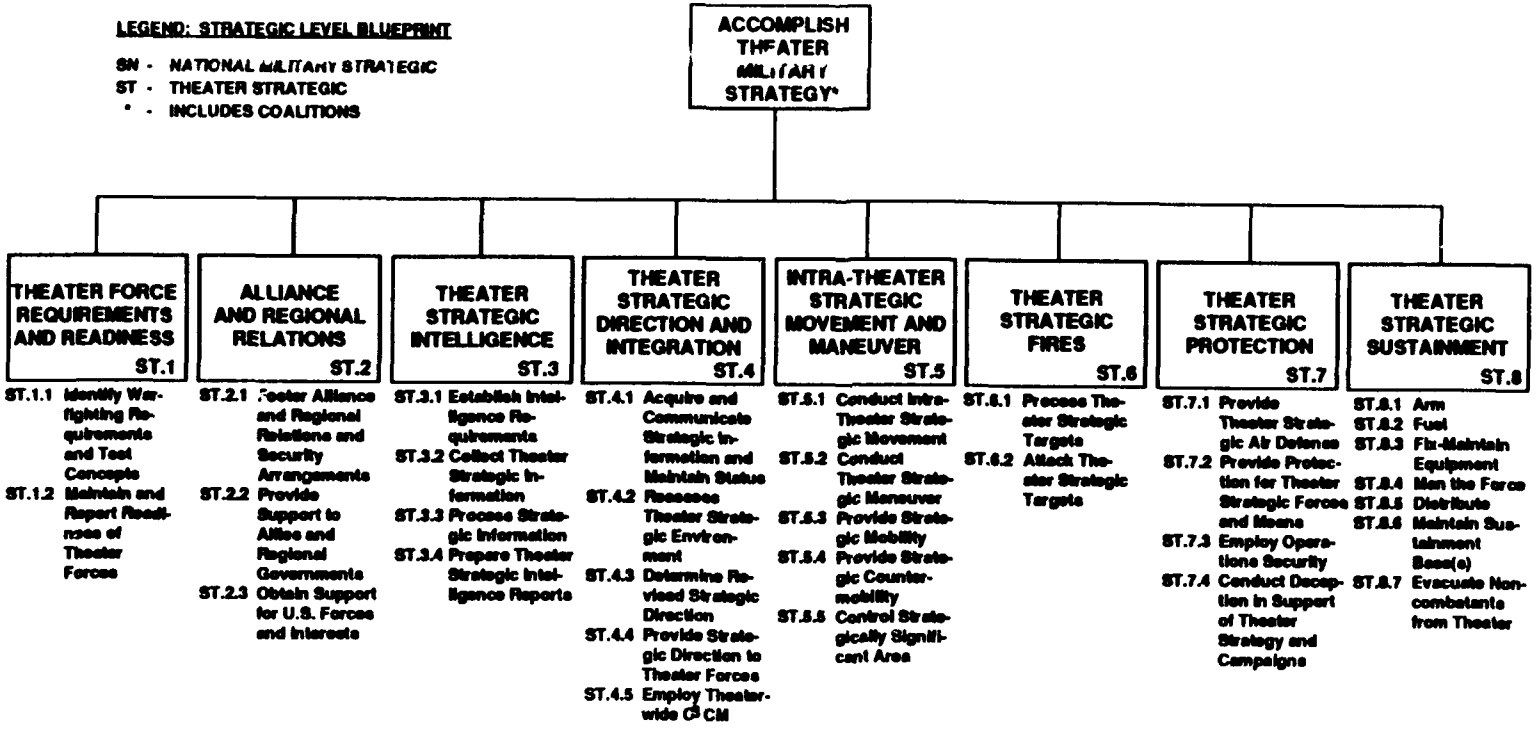
SN.7.3.2 Regenerate Forces. To restore the cohesion, discipline, and fighting effectiveness of a theater force, beyond the capability of the unified commander, through large-scale replacement of personnel, equipment, and supplies; reestablishment of essential command and control; and conduct of mission-essential training. Regeneration is more difficult to execute because it requires greater resources and effort; regeneration of a division would normally be done within theater assets (TAACOM) but a corps would require outside assistance and possibly the reconstitution site.

SN.7.3.3 Redistribute Unit Personnel and Equipment. To dispense assets of forces to other organizations within a theater or to other CINCs when reorganization or regeneration are impractical and strategic priorities indicate otherwise.

SN.7.4 Set Sustainment Priorities. To determine worldwide priorities for supporting theater campaigns and strategies in order to maximize the utilization of available resources in the context of the national military strategy.

Note: Applicable to this function is function SN.5.3.5 Set Priorities and Allocate Resources in the SN.5 Strategic Direction and Integration operating system.

BLUEPRINT FOR THE STRATEGIC LEVEL OF WAR
PART 2: THEATER - SUMMARY



Appendix A

Blueprint for the Strategic Level of War

Part 2: Theater

Section VIII. ST.1 Theater Force Requirements and Readiness

ST.1. Theater Force Requirements and Readiness. To establish a need justifying the timely allocation of resources to achieve a capability to accomplish approved theater strategic objectives, missions, or tasks.

ST.1.1 Identify Warfighting Requirements and Test Concepts. To provide to the CJCS, the NCA, alliance authorities, and chiefs of Services the theater's warfighting needs in light of guidance, threat estimates, technology and projected capabilities and concepts. This includes testing and recommending concepts for mobilizing, deploying, sustaining and employing the force. Requirements include the CINC's perception of the size and structure of the force needed to successfully execute the theater strategy and achieve national military objectives in the theater and where necessary adjustments to restrictions and constraints.

ST.1.1.1 Provide OPLANS for Mobilization Planning and Execution. To develop theater operation plans in conjunction with the JCS and Services for approval by the NCA to provide the basis for mobilization, deployment and sustainment planning and execution.

ST.1.1.2 Provide Deployment Requirements. To prepare planned need and/or a request from unified commander to the National Command Authorities (NCA) through the Chairman, Joint Chiefs of Staff (or the combined chiefs of staff in an alliance) for the strategic movement of joint/combined forces from outside into a theater of war in a way consistent with the theater strategy, war plans, or theater campaign plan, sequencing of unified operations, and time-phased force deployment list or data and the operational commander's subordinate campaign scheme.

ST.1.1.3 Determine Theater Warfighting Needs, Solutions, and Concepts. To analyze and determine the theater needs and proposed solutions to those needs in terms of improved capabilities in doctrine, training, leader development, organizations, and materiel and warfighting concepts and to report those requirements and recommendations to the CJCS, NCA and alliance authorities for force development.

ST.1.1.4 Determine Theater Force Size and Structure Requirements. To analyze and determine the size of the theater

force in terms of major formations and the support force requirements necessary to execute successfully the national military strategy and to provide that information to the CJCS and NCA for force development and establishing resource priorities.

ST.1.2 Maintain and Report Readiness of Theater Forces. To retain, and report on, the ability of theater forces, units, weapons systems, or equipments to deliver the outputs for which they were designed (includes the ability to deploy and employ theater forces without unacceptable delays) in executing theater strategy and campaigns. It includes reporting force status in the areas of personnel, equipment on hand, equipment readiness, and training (with respect to accomplishing the command's METL).

ST.1.2.1 Provide Status of Resources and Training. To report on and maintain the status of resources and training of theater forces.

ST.1.2.2 Determine and Report Military Capability. To report on and maintain the status of military capability of theater forces.

ST.1.2.3 Conduct Joint After-Action Reporting. To provide joint after-action reports on operations by theater forces.

Section IX. ST.2 Alliance and Regional Relations

ST.2. Alliance and Regional Relations. Those political-military activities conducted in a theater throughout the operational continuum by the combatant commander within existing alliances or in developing new, improved, or status quo relations with countries not in an alliance with the US. These activities are often done with or through the ambassador, or country team, and frequently involves more than one nation, allied or otherwise. The activities include functions relating to enhancing relations with the US, and to either providing or receiving support.

Note: The ST.2 Alliance and Regional Relations operating system is linked and interrelated with several national military operating systems (i.e., SN.1 Force Development, SN.3 Strategic Deployment, SN.4 Strategic Intelligence, SN.5 Strategic Direction and Integration, SN.6 Employment, and SN.7 Sustainment.

ST.2.1 Foster Alliance and Regional Relations and Security Arrangements. To attempt to foster cooperative relationships with other nations and international commands and agencies in consideration of the diversity of extant political systems, alliances, and the unique character of the people and their leadership. It includes promoting regional stability and being sensitive to the perceptions and interests of the different nations in the region.

ST.2.1.1 Enhance Regional Politico-Military Relations. To strengthen and promote Alliances through support of country team relationships. It includes understanding and adjusting to national and regional concerns and differences, reviewing and advising on status of forces agreements and similar type issues, and providing information management and public affairs programs.

ST.2.1.2 Provide or Promote Regional Security and Interoperability. To work with allies within the framework of military alliances to improve or secure US posture in the region. It includes establishing combined command relationships and authority, developing agreement on the threat, assessing operational capability deficiencies, establishing combined interoperability arrangements, determining international logistics arrangements, defining and disseminate combined rules of engagement, conducting combined training, all while developing host nation relations.

ST.2.2 Provide Support to Allies and Regional Governments. To provide humanitarian assistance, security assistance, nation building and other forms of support in furtherance of national objectives.

ST.2.2.1 Conduct Security Assistance Activities. To provide defense articles, military training, and other defense-

related services, by grant, credit, or cash sales, in furtherance of national policies and objectives to appropriate states in the region. It includes ensuring coordination between the combatant command, chiefs of US diplomatic missions, and alliance members on regional security assistance matters.

ST.2.2.2 Conduct Civil Affairs in Theater. To conduct those phases of the activities of a theater commander which embrace the relationship between theater military forces and civil authorities and people in a friendly country or area or occupied country or area when military forces are present.

ST.2.2.3 Conduct Humanitarian Assistance and Disaster Relief. To anticipate and respond promptly to alliance and regional requests for assistance to such events as flooding, earthquakes, hurricanes and typhoons, or other natural disasters. CINCS anticipate these events from their knowledge of current conditions or historical patterns and prepare contingency plans, forces and equipment for rapid response to requests. It includes seeking advance agreements on procedures and restraints on the use of alliance resources for this purpose. It includes providing assistance before, during, or after hostile action or natural or man-made disasters to reduce the probability of damage, minimize its effects, and initiate recovery. Activities include, in addition to the above, survey of the disaster area and prioritized needs, health services, communications, shelter, subsistence, water, engineering support, transportation, etc.

ST.2.2.4 Coordinate Interagency Activities. To be kept informed of, and to coordinate, activities among national and international agencies (e.g., intelligence, police, and others) that could adversely affect the command or involve military forces.

ST.2.2.5 Provide Nation Assistance Support. To provide, in response to NCA directive, support and assistance in developing other nations, normally in conjunction with the State Department and/or an alliance. The degree of support will be dependent upon operational conditions.

ST.2.3 Obtain Support for U.S. Forces and Interests. To make agreements with, and seek the assistance of, alliance and other countries in the region for support of U S Forces in the theater throughout the operational continuum. This support includes but is not limited to sustainment, intelligence, operations, C3, overflight and handling rights, lines of communications, facilities, space, labor, skilled manpower, etc.

ST.2.3.1 Arrange Stationing for US Forces. To house and dispose forces to best support anticipated wartime operations within the bounds of physical limitations and political constraints.

ST.2.3.2 Establish Bilateral Arrangements. To establish, in anticipation of requirements to conduct operations with friends and allies outside an alliance command structure, procedures that will facilitate command and control, ensure that action by the respective national forces are complementary, prevent fratricide, and similar operations. It includes taking into account differences in language, customs, organization, capability, level of training, and political constraints. This includes establishing command relationships.

ST.2.3.3 Arrange Sustainment Support for Theater Forces. To obtain sustainment support from sources other than US Army CSS organizations and includes obtaining the following: host nations support, logistics civil augmentation, third country support, and captured materiel.

ST.2.3.4 Obtain Combined Support against Nonmilitary Threats. To identify, and obtain cooperation and support of allies and friends in the region for protection against, nonmilitary threats to civilian and military personnel and key facilities in the combatant command. Threats of this nature include narcotics and terrorism activities.

Section X. ST.3 Theater Strategic Intelligence

ST.3. Theater Strategic Intelligence. That intelligence which is required for the planning, development and conduct of theater strategy and campaigns and unified operations within a theater. At the theater strategic level, the joint and combined intelligence system concentrates on the collection of information, and the analysis of that information, which will lead to the identification and location in the theater (or adjacent theaters) of the strategic center(s) of gravity (or high payoff targets affecting the centers of gravity) that, if successfully attacked, will achieve the assigned strategic aim(s) and theater objectives.

Note: Theater threat analysis includes determining enemy force composition and capabilities, as well as strength, location and disposition, reinforcement and sustainment capacity, combat efficiency, C2 sophistication, and specific vulnerabilities. It includes continuous assessment of changing enemy capabilities and intentions including political intent and alignments and support networks. It includes analysis of likely or possible enemy courses of action, theater geography and time and space factors, particularly NBC operations. Theater strategic intelligence includes determining when, where, and in what strength the enemy will stage and conduct theater level campaigns and strategic operations in the theater. It also includes providing intelligence support for friendly C3CM. Means include theater and national intelligence assets.

ST.3.1 Establish Intelligence Requirements. To determine and prioritize intelligence requirements in order to plan the collection and analytical effort and to allocate appropriate resources to these functions.

ST.3.2 Collect Theater Strategic Information. To gather information from U.S. and allied strategic, operational, and tactical sources relative to threat strategic and operational forces and their strategic center(s) of gravity (and related high payoff targets), and to the nature and characteristics of the assigned area of responsibility (including area of interest).

ST.3.2.1 Collect Information on Strategic Situation, Geography and Significant Hazards. To obtain information with strategic implications on enemy force vulnerabilities, threat operational doctrine and forces (land, sea, and air), and the nature and characteristics of the area of interest to include hazards (e.g., NBC contamination of large areas).

Note: The nature and characteristics of the area include the structure and limitations of the theater, theater of war, and the area of strategic interest. It also includes significant political, economic, industrial, geographic, demographic, topographic, hydrographic, climatic (weather, terrain, etc),

cultural, and psychological features of the area of interest. Threat includes threat allies.

ST.3.2.2 Collect Information on Strategic Targets. To obtain information that supports the detection, identification, and location of enemy strategic (or operational) centers of gravity and high-payoff targets whose attack will lead directly or indirectly to the defeat of the enemy. Assessing damage to strategically significant targets is included under this function.

ST.3.3 Process Strategic Information. To convert strategic information into intelligence through collation, evaluation, analysis, integration, and interpretation.

Note: This function includes the evaluation of threat joint and combined land, sea, air and space forces, the nature and characteristics of the area of operations (to include the unified commander's area of interest), and integration of threat information to determine strategic (and operational) centers of gravity. This function also includes assessing enemy C3CM capabilities and actions and friendly vulnerability to enemy C3CM and other actions.

ST.3.3.1 Evaluate Strategic Threat Information. To continuously analyze the enemy in terms of its mobilization potential, military-strategic and operational organization (including alliance forces) and dispositions, doctrine, capabilities, command and control structure and decision-making processes. This evaluation includes continuous refinement of the order of battle for the entire array of the unified, joint and combined forces available to the enemy commander in the theater, personalities and history of performance, and the doctrine for employment of forces on a strategic and operational level. Assessment of enemy C3CM capabilities is included here.

ST.3.3.2 Analyze Theater Area of Interest. To conduct an analysis of the nature and characteristics of the theater (in particular the theater of war) to determine the types and scale of operations the theater will support and the impact of significant regional features and hazards on the conduct of both friendly and enemy theater strategy and campaigns, or unified operations. The analysis includes the impact of strategic limiting factors (e.g., rules of engagement) and determination of the unified commander's area of interest. Significant regional features include political, economic, industrial, geographic, demographic, topographic, hydrographic, climatic (weather, terrain, etc), cultural, lingual, historical and psychological features of the area. It also includes analysis of significant alterations to the theater of war which create strategically significant hazards (e.g., NBC contamination of large areas).

ST.3.3.3 Integrate Strategic Intelligence. To develop strategic level, time phased intelligence by combining data from the evaluation of the nature and characteristics of the area and the analysis of the threat to yield the enemy theater commander's strategic intentions, center(s) of gravity, and high-payoff targets.

ST.3.3.4 Develop Indications and Warning. To determine changes in the military, political, economic, social, and diplomatic behavior of the enemy that could lead to hostile activity to preclude strategic surprise.

ST.3.3.5 Identify Operational Vulnerabilities. To identify strengths, vulnerabilities and centers of gravity of enemy forces for targeting. These vulnerabilities include friendly forces targeted for C3CM (Counter-C3), EW and deception operations (counterdeception) by the enemy, and security weaknesses of friendly forces.

ST.3.4 Prepare Theater Strategic Intelligence Reports. To formulate and convey in a timely way strategic intelligence estimates and reports on the threat strategic (and operational) situation, intentions, targets (to include high payoff strategic targets and enemy centers of gravity), characteristics of the theater of war, other appropriate intelligence reports, and friendly vulnerabilities.

Note: For disseminating intelligence and other information see function ST.4.1.1.

Section XI. ST.4 Theater Strategic Direction and Integration

ST.4. Theater Strategic Direction and Integration. The guidance expressed through revised theater strategy, derived from national security strategy and national military strategy, relative to the attainment of strategic goals and objectives. The CINC receives strategic direction from national security strategy and national military strategy and interagency activities. In turn, the CINC provides guidance and direction for the employment of unified, joint, Service, and combined forces through his theater strategy. These three strategies (and related strategic plans) integrate the national and military ends, ways and means as well as theater ends, ways and means.

ST.4.1. Acquire and Communicate Strategic Information and Maintain Status. To gain possession of information on the national security and national military strategy, theater missions and military objectives, enemy theater forces and centers of gravity, friendly forces and vulnerabilities, terrain and weather (includes characteristics of the area of interest, climate), and other information, by or for the unified commander or his staff, to translate that information into usable form, to retain, and to disseminate it. It includes informing and advising the NCA and Chairman JCS, alliance heads of state and defense ministers and combined chiefs of staff, and securing an understanding of strategic guidance or an understanding of national and alliance policy, objective(s) and strategic aim, other elements of national and multi-national power (e.g., political, economic, informational). This function includes interfacing with friendly and enemy (in occupied territory) civilian government authorities in the unified commander's AOR.

ST.4.1.1 Communicate Strategic and Operational Information. To send and receive strategically significant information and data from one echelon of command to another by any means.

ST.4.1.2 Manage Theater C3 Systems for Communicating Strategic Information. To direct, establish, or control the means used in sending or receiving strategic (or operational) information, and to use communication networks and modes for obtaining or sending strategic information.

Note: This function includes the requirements for unified command and control systems to operate within the Worldwide Military Command and Control System, the Joint Operational Planning and Execution System, the National Military Command System, and other such systems.

ST.4.1.3 Maintain Strategic Information, Data and Force Status. To screen, circulate, store, and display strategic and operational information,data and force status in a form suitable for the decision making process of the unified commander and his staff.

ST.4.1.4 Monitor Worldwide and Theater Strategic Situation. To be aware of and to understand national and alliance objectives, policy, goals, other elements of national and alliance power (e.g., political, economic, informational), political aim, and the national military strategy. This function includes staying current on, and projecting, events throughout the theater and in other theaters.

ST.4.2 Reassess Theater Strategic Environment. To evaluate and appraise the objective factors peculiar to the areas in which the combatant command operates. The theater strategic environment is a composite of the conditions, circumstances, and influences in the theater that affect the employment of military forces and bear on the decisions of the operational chain of command. Of particular importance are national and international security considerations across the operational continuum at the three levels of war. To continuously evaluate information received through reports or the personal observations of the theater commander and his operational commanders on the general situation in the theater and in the conduct of the theater strategy, campaigns, or unified operations, the operational situation and the worldwide situation. In particular, it includes deciding whether different actions are required from those that would result from the most recent orders issued.

ST.4.2.1 Review Current Situation. To examine on-hand strategic information. This function includes analyzing the assigned theater missions (includes assigned strategic military objectives) and related tasks in the context of national military war plans and strategy and the strategic aim, and the combining of on-hand with incoming information while separating critical from noncritical information.

ST.4.2.2 Reassess National and Alliance Strategy. To gather information, raise issues, and facilitate the integration of strategy(ies), operational planning, defense capabilities, CINC's inputs, risks, and program assessments during the CJCS' review process. The strategy review will provide the principal guidance and support for developing the next Chairman's Guidance, National Military Strategy Document, Joint Strategic Capabilities Plan, and Chairman's Program Assessment.

ST.4.2.3 Review National Security Considerations. To review established command relationships, national security policies, strategic direction, resources to be allocated, and the effects of the other elements and instruments of national power and policy respectively. This function includes a review of the most recent NCA and CJCS planning guidance.

ST.4.2.4 Review International Security Considerations. To review international security agreements, including command relationships within alliances and coalitions, collective security strategies, global and regional stability, and regional interrelationships.

ST.4.2.5 Project Future Theater Campaigns or Strategic Operations. To see beyond campaign phases and major operations and estimate enemy's future actions, and to anticipate own actions for employment of theater military forces after each phase of a current campaign or strategic operation to include consideration of possible local reversals, operational and tactical failures or take advantage of success and opportunities.

ST.4.2.6 Decide on Need for Action or Change. To decide whether actions are required which are different from those which theater forces have already been directed to execute.

ST.4.3 Determine Revised Strategic Direction. To conduct the process of making detailed staff estimates and decisions for implementing the NCA's national military strategy, policy, objectives and war plans.

Note: Inherent in this function are activities related to DOD planning, programming, and budgeting (CB), but this process is not addressed explicitly in the Blueprint.

ST.4.3.1 Conduct Strategic Estimate. To use the results of the reassessment of the theater strategic environment to estimate the broad strategic factors that influence the determination of his missions, objectives, and courses of action and forms the concepts of operation of any theater plan. The estimate is continuous and includes the strategic direction received from the NCA or the authoritative body of an alliance or coalition. The strategic estimate contains strategic concepts that act as the basis of theater strategy.

Areas normally included in the estimate are as follows: political, social, informational, psychological, and economic factors; theater geography and climatology; military consideration (e.g., forces available, strategic and operational mobility of forces; LOCs; attitude of populace; rules of engagement and utility of military forces; war reserve stocks; C3 assets, threats and instabilities.

ST.4.3.2 Develop Theater Strategy. To develop the collective strategic concepts and courses of action directed toward securing the objectives of national and alliance policy by the use of force or threatened use of force within a theater. Theater strategic concepts, included in the strategy, are statements of what is to be done in broad, flexible terms. The theater strategy provides strategic direction for unified (and combined) operations across the operational continuum to

subordinate commanders. In the theater strategy CINCs translate the strategic direction contained within the national strategy into theater strategy and subsequent plans.

ST.4.3.3 Issue Planning Guidance. To establish guidance for planning tasks to be accomplished by subordinate commands and the unified commander's staff regarding theater strategy development. This includes initial and subsequent planning guidance.

ST.4.4 Provide Strategic Direction to Theater Forces. To establish a command climate which provides strategic intent and direction to subordinates such that they understand their mission and military objectives and their contribution to attainment of the CINCs theater strategic concept and intent and assigned strategic objectives. It includes maximum decentralized conduct of the theater strategy, campaigns, and unified operations. Where appropriate, this function includes strategic direction to combined forces in the theater.

ST.4.4.1 Prepare/Coordinate Theater Strategy, Campaign Plans or Operations Plans and Orders. To develop a plan or order which executes the theater strategic concept and intent of the CINC and of the NCA's national military strategy (and alliance military strategy where appropriate) and war plans. This function includes coordination of Service component support and supporting plans and obtaining NCA, CJCS and alliance (as appropriate) approval of the plans and orders. It also includes coordination with other combatant commands.

Note: There is no attempt here to include each and every element of a sound plan for a theater campaign or unified operation. For example, the organization of the theater strategic force in a theater campaign or unified operation would be a critical part of the plan but is not included here. However, the theater strategy will contain the ends (theater strategic objective(s)), ways (strategic concept and intent), and means (resources necessary to accomplish the ends).

ST.4.4.2 Issue Theater Strategic and Contingency Plans and Orders. To submit orders and plans for transmission to subordinate, supporting or attached organizations for execution and to adjacent and higher organizations for coordination. The transmission of the orders and plans by any means is part of the function, 4.1.1 Communicate Strategic and Operational Information.

ST.4.4.3 Orchestrate Unified Operations and Subordinate Campaign Plans. To combine, sequence, and synchronize the operations of the theater's assigned, attached, or supporting Service forces to exploit those forces' capabilities in ways that attain the command's objectives and attain strategic advantage. It includes the vertical integration of functions within each

operating system and the horizontal integration of the functions across operating systems in time and space to maximize a unified effort.

Note: It is this function that, if effectively executed, permits the friendly theater commander to get inside the enemy commander's decision cycle and with smaller forces defeat larger forces.

ST.4.5 Employ Theater-wide Command, Control, Communications Countermeasures (C3CM). To integrate the use of operations security, military deception, jamming, and physical destruction, supported by intelligence, to deny information, to influence, degrade, or destroy adversary command, control, and communications (C3) capabilities and to protect friendly C3 against such actions. Employ C3CM includes two component functions, deny enemy effective C3 of his own forces (also called counter-C3) and protect friendly C3 (also called C3-protection).

Note: Applicable to this function are a number of functions covered elsewhere in the Strategic Blueprint. For counter-C3 see functions for selecting targets and means of engagement (ST.6.1), deception (ST.7.4), and degrading or destroying enemy C3I (ST.6.2). For C3-protection see the functions for employing OPSEC (ST.7.3), using camouflage and other survivability measures, conducting ECCM (ST.7.2.3), and minimizing the effect of friendly C3CM on friendly C3I (ST.6.2.3). For intelligence support of C3CM see the operating system, ST.3 Theater Strategic Intelligence.

Section XII. ST.5 Intra-Theater Strategic Movement and Maneuver

ST.5. Intra-Theater Strategic Movement and Maneuver. The disposition of assigned and apportioned U S forces, as well as forces of other friendly nations, within a theater to create a relative strategic advantage of position for the execution of the theater strategy for achieving national and alliance policy and objectives. It includes the functions of moving or deploying forces for strategic advantage within a theater of war.

ST.5.1 Conduct Intra-Theater Strategic Movement. To regroup, deploy, shift, or move, unified, joint or combined forces within the theater from less threatened or less promising areas to more decisive positions elsewhere (i.e., the friendly position obtained relative to the enemy) by any means (joint, allied, host nation or third country) or mode (air, land or sea). This movement can be from within the theater into a theater of war or theater (or area) of operations, or from one theater (or area) of operations to another theater (or area) of operations within the theater.

Note: The provision of augmentation transportation for strategic movement from sources not organic to a combatant command are analyzed under Theater Strategic Sustainment.

ST.5.1.1 Process Movement Requirement. To review and approve a request from a subordinate commander for forces from outside his theater (or area) of operations into his area. Note: A Combatant commander may make an intra-theater deployment without a request from an operational commander.

ST.5.1.2 Conduct Intra-Theater of War Movement of Forces. To conduct the actual relocation or movement of unified, joint or combined forces by any means or mode of transportation from their position within a theater to another position within the theater, or theater of war, in support of the theater commander's strategic plan for achieving strategic results.

ST.5.2 Conduct Theater Strategic Maneuver. To deploy unified, joint or combined strategic forces for achieving a position of advantage over the enemy by successful strategic concentration in conducting unified operations (offensive or defensive) for accomplishing theater campaign or other national and alliance strategic plans.

ST.5.2.1. Posture Forces for Strategic Maneuver. To group forces and means into strategic formations for executing theater war or strategy plans or campaigns. Strategic formations support the theater strategic concept and intent and provide for the effective use of all elements of the force, a capability for maneuvering and increasing the strength of forces and means during the unified operation, a rapid transformation from strategic offensive to strategic defensive operations without the

loss of momentum or effectiveness, the conduct of continuous operations, and the protection of the force.

ST.5.2.2 Conduct Theater Strategic Concentration of Forces. To assemble designated theater forces in areas from which it is intended that operations of the assembled force shall begin so that they are best disposed to initiate the combatant commander's plan of campaign and achieve strategic advantage(JCS Pub 1-02, p.345).

ST.5.2.3 Provide Strategic Reserves. To establish an external reinforcing force which is not committed in advance to a specific major subordinate command, but which can be deployed to any region for a mission decided at the time by the theater commander.

ST.5.3 Provide Strategic Mobility. To facilitate the movement of joint, combined, unified formations in a theater campaign or unified operation without delays due to strategically significant terrain. It is the quality or capability of military forces which permits them to move from one place in a theater into or between a theater (or area) of operations or war and achieve strategic concentration for strategic advantage. It includes overcoming strategically significant obstacles and enhancing movement of theater forces.

ST.5.4 Provide Strategic Countermobility. To delay, channel, or stop offensive air, land, space, and sea movement by enemy strategic formation in attempting to achieve strategic concentration for strategic advantage.

ST.5.5 Control Strategically Significant Area. To dominate in a theater the physical environment (land, sea, air, and space) whose possession provides either side a strategic advantage, thus denying it to the enemy by either occupying the strategically key area itself or by limiting his use or access to the environment or area. For an area or environment to be strategically key, its dominance must achieve strategic results or deny same to the enemy.

Section XIII. ST.6 Theater Strategic Fires

ST.6 Theater Strategic Fires. The application of firepower to achieve a decisive impact in the conduct of theater strategy, theater campaigns, and unified operations. Theater strategic fires are by their nature primarily joint/combined activities or functions. Theater Strategic Fires would be coordinated with maneuver in a strategic or operational campaign as a coequal component. Such fires may be independent of land or sea maneuver.

ST.6.1 Process Theater Strategic Targets. To select land, sea, and air targets of major and possibly decisive impact on achieving strategi objectives and match appropriate unified, joint or combined strategic fires. These targets would include, but not be limited to, targets found in regional nuclear strike plans and coordinated with national strategic fires.

ST.6.1.1 Select Strategic Targets in the Theater for Attack. To evaluate each strategic target to determine if and when it should be attacked for optimum effect on enemy strategic centers of gravity and own theater commander's strategic concept and intent.

Note: Important associated functions are found under Intelligence and Direction and Integration, respectively. Air targets include offensive counterair but do not include air defense or defensive counter-air targets; these are covered in the Protection operating system. Included here are the destruction and degradation of enemy C3CM means which include EW.

ST.6.1.2 Allocate Unified, Joint/Combined Theater Fires Resources. To apportion, assign or allocate theater strategic fires resources for the priority employment of joint and allied fire systems on strategic targets in the theater of war according to the unified commander's strategic plan and intent.

ST.6.2 Attack Theater Strategic Targets. To enter into conflict with the enemy to destroy or neutralize strategic level targets and to shape and control the tempo of theater campaigns and unified operations using all available joint and allied fires assets (includes naval; air; space (e.g., satellites); ground long-range cannon, rockets and missiles; SOF; conventional and special munitions) against land, air and naval (surface and subsurface) targets having strategic significance.

ST.6.2.1 Conduct Lethal Attack on Strategic Targets. To engage strategic land, sea, air, and space targets (air targets other than air defense or defensive counterair targets) with available joint and allied theater strategic fires delivery systems to delay, disrupt, destroy, or degrade enemy forces or critical functions and facilities (including C3I targets), and to affect his will to fight, for strategic results. Means include

surface and subsurface and sea based joint and combined theater fires and air and/or space forces (including helicopters, UAV, space vehicles, etc.) systems. This function includes the attack of offensive counter-air targets.

ST.6.2.2 Conduct Nonlethal Attack on Theater Strategic Targets. To engage operational land, sea and air (less air defense) targets with joint and combined means designed to impair, disrupt or delay the performance of enemy forces, functions and facilities to achieve strategic results. The means include the use of psychological operations, special operations forces, chemical contamination of equipment and facilities, electronic warfare (jamming) and other Command, Control, Communications Countermeasures (C3CM).

ST.6.2.3 Integrate Theater Strategic Fires. To integrate theater strategic fires on single or multiple theater targets of strategic significance at the decisive time and place. This integration includes lethal and/or nonlethal attacks to include friendly C3CM and EW measures and minimizing their effect on friendly C3I. It also includes integrating theater strategic fires with national military strategic fires and operational fires within the theater in order not to disrupt fires supporting campaigns and major operations or reveal friendly force intentions at any level.

Section XIV. ST.7 Theater Strategic Protection

ST.7. Theater Strategic Protection. The conservation of the fighting potential of a unified force so that it can be applied strategically at the decisive time and place. It includes actions taken to counter the enemy's taking strategic action by making soldiers, systems, and strategic formations difficult to locate, strike, and destroy. Theater Strategic protection includes protecting joint and combined theater air, space, land and sea forces, bases, facilities, and LOCs from enemy strategic maneuver and concentrated enemy air, ground, and sea attack and natural occurrences.

Note: Some subfunctions associated with the protection, or survivability, of the force are included under other related Theater Strategic level Operating Systems. Survivability and protection functions regarding soldier health and welfare are covered in the theater strategic sustainment function 8.4 Man the Force. Dispersion and mobility actions are covered in the theater strategic deployment and maneuver functions. Offensive counter-air activities are included under theater strategic fires. Theater strategic protection includes C3-protection - That division of C3CM comprising measures taken to maintain the effectiveness of friendly C3 despite both adversary and friendly counter-C3 actions; for this function see 4.5 Employ Theater-wide C3CM under the Theater Strategic Direction and Integration operating system.

ST.7.1 Provide Theater Strategic Air Defense. The protection of theater-wide forces, and theater forces conducting a strategic maneuver, from air attack (including attack from or through space) through both direct defense and destruction of the enemy's air attack capacity in the air. It includes such measures as use of aircraft (includes helicopters), interceptor missiles, air defense artillery, non-air defense weapons in an air defense role, and electronic countermeasures.

Note: This operating system pertains to defensive counter-air activities. Offensive counter-air activities are included under Theater Strategic Fires. At the theater strategic level, air defense concerns protecting critical points and facilities (e.g., ports, key bridges, theater of war command and control facilities) in the COMMZ (theater commander's AOR), support forces in the COMMZ not in a theater (or area) of operations, and forces transiting the COMMZ (outside a theater (or area) of operations), or critical facilities in the combat zone with strategic significance. It also includes the protection of theater strategic force formations in moving to a unified operation or theater campaign. Theater strategic air defense is always joint and can be a combined activity.

Strategic Blueprint

ST.7.1.1 Process Theater Strategic Air Defense Targets. To select offensive air threats to the strategic environment and match appropriate response to ensure freedom of action for theater campaigns and unified operations and protection of key assets. This function includes allocation of targets for attack and the integration of join and combined theater air defense forces.

Note: Applicable to this function is the provision of early warning of air attack, i.e., to reduce the threat from surprise air attack on unified forces and facilities by use of sensors and indications of imminent hostile activity before it would be otherwise detected by the air defense environment. This function is covered in Theater Strategic Intelligence, under ST.3.3.4 Develop Indications and Warning.

ST.7.1.2 Provide Airspace Control. To provide safe, efficient, and flexible use of airspace (includes space). This includes employing positive control measures and procedural control measures.

Note: Applicable to this function is the identification of friend or foe, i.e., to establish hostile criteria for early separation of friend and foe to permit maximum beyond-visual-range engagement and avoid fratricide. This is covered in the Theater Strategic Intelligence function, ST.3.3.4 Develop Indications and Warning.

ST.7.1.3 Attack Enemy Air Defense (AD) Targets. To intercept, engage, destroy or neutralize enemy strategic air formations (includes aircraft, missiles and space vehicles) in flight using all available air defense capabilities of all friendly theater forces to achieve strategic results in the theater. This function includes conducting lethal and nonlethal attack on strategically significant air defense targets.

Note: The provision of rules of engagement for establishing standard control procedures applicable to combat engagements with other forces is covered under Theater Strategic Direction and Integration in ST.4.3 Determine Revised Strategic Direction and in ST.4.4.1 Prepare/Coordinate Theater Strategy, Campaign Plans or Operations Plans and Orders.

ST.7.2 Provide Protection for Theater Strategic Forces and Means. To safeguard own strategic and operational center(s) of gravity and force potential by reducing or avoiding the effects of enemy strategic level actions (includes movement, and radio electronic combat).

ST.7.2.1 Prepare Strategically Significant Fortifications. To provide protective construction hardening for strategically significant forces and key facilities (e.g., command and control, logistics, terminals).

ST.7.2.2 Remove Strategically Significant Hazards. To eliminate the presence of hazards which adversely affect execution of the unified commander's plan.

ST.7.2.3 Protect Use of Electromagnetic Spectrum. To take actions to ensure friendly effective use of the electromagnetic spectrum despite the enemy's use of electronic warfare. This is a division of electronic warfare and also called ECCM.

ST.7.2.4 Provide Security for Theater Strategic Forces and Means. To enhance freedom of action by reducing friendly unified forces vulnerability to hostile acts, influence, or surprise. It includes measures to protect from surprise, observation, detection, interference, espionage, and sabotage. This function includes actions for protecting and securing the flanks in unified operations and protecting and securing critical installations, facilities, and systems.

ST.7.3 Employ Operations Security. To take action to avoid friendly force indicators associated with planning and conducting theater campaigns and unified operations from the enemy commander's perspective and thus protecting friendly intentions.

ST.7.3.1 Employ Signal Security (SIGSEC). To protect emitters and information transmitted through friendly unified command and control communications electronic systems from enemy exploitation.

ST.7.3.2 Employ Concealment Techniques. To provide protection of theater strategic forces and facilities from enemy observation and surveillance sensors.

ST.7.3.3 Avoid Patterns. To vary activities and ways of conducting unified operations to avoid predictable patterns which are vulnerable to enemy interception.

ST.7.4 Conduct Deception in Support of Theater Strategy and Campaigns. To manipulate enemy theater commander's perceptions and expectations into a false picture of reality that conceals friendly actions and intentions (theater strategy) until it is too late for enemy forces to react effectively within the context of the national military or theater commander's deception plan. Several measures are available to a theater commander for conducting deception to include: physical, technical or electronic (imitative, manipulative, and simulative), and administrative.

Strategic Blueprint

Note: Users are referred to related functions located elsewhere in the Theater Strategic Blueprint. These related functions include the following: ST.7.3 Employ OPSEC; ST.7.5 Provide Security for Theater Strategic Forces and Means; ST.3. Theater Strategic Intelligence (intelligence support for deception planning and supervision); ST.4. Theater Strategic Direction and Integration (various organizing, planning and directing functions, and resource allocation).

ST.7.4.1 Protect Details of Theater Strategy and Campaign Plans and Operations. To take actions to prevent the enemy from learning the true intent of the unified commander's strategy and campaign plans, strategic operations plans, and deception plans. This function includes limiting to the last possible moment the number of people aware of friendly plans; delaying or masking theater strategic movements and preparations; deceiving friendly leaders and soldiers where necessary; other appropriate actions.

ST.7.4.2 Spread Misinformation Regarding Conduct of Theater Strategy, Campaigns, and Unified Operations. To develop and disseminate the deception plan and story, consistent with the national strategic deception plan, focused on enemy's expectations, preconceptions, and fears concerning friendly intent in order to deceive the enemy theater commander of the true friendly intentions regarding the strategy and campaigns and unified operations. Deception plan will utilize the entire joint and combined theater forces and strategic means, as appropriate, for deceiving the enemy.

Note: The deployment and maneuver of theater strategic and operational forces for deception purposes will be analyzed under the deployment and maneuver operating system.

ST.7.4.3 Assess Effect of Theater Deception Plan. To determine the extent to which the deception story and related actions have had on the plans and actions of the opposing theater commander and his staff.

Note: The organization responsible for deception planning and supervision requires intelligence support; those activities relating to intelligence support or deception should be analyzed under the function ST.3. Theater Strategic Intelligence. The function, friendly counterdeception, is included in the Theater Strategic Intelligence operating system under the function ST.3.3.5 Identify Friendly Vulnerabilities.

Section XV. ST.8 Theater Strategic Sustainment

ST.8. Theater Strategic Sustainment. Those logistical and other support activities required to sustain the force in the execution of theater strategy, theater campaigns, and unified operations within a theater. Strategic sustainment extends from the theater rear or the theater of war sustaining base (COMMZ) or bases, or forward sustaining base(s) in a smaller theater, to theaters (or areas) of operations and forward CSS units, resources and facilities organic to major tactical organizations. This theater sustaining base, in performing its support functions, links national military strategic sustainment to operational support and tactical CSS. This operating system deals with the resources associated with the ends and ways of strategy.

Note: Theater Strategic Sustainment is almost always a joint and combined effort. It includes sustaining the tempo and continuity of operations throughout a theater in theater campaigns or unified operations. There are functions related to sustainment that are included under functions in the Theater Strategic Direction Integration operating system, e.g., setting theater of war priorities; establishing theater stockage levels; managing critical materials; and obtaining U S national, alliance, or joint support. Where theaters (or areas) of operations exist within a theater of war, COMMZ support operations will most likely be subdelegated to the theater (or area) of operations commander; for those situations refer to the Operational Level of War Blueprint of the Battlefield. The Theater Strategic Level Blueprint is much broader in its scope and includes the whole theater support structure. Therefore, the two support structures are not considered redundant.

ST.8.1 Arm. To provide for the replenishment of arms, ammunition, and equipment required for supporting US Army, other US Services, and allied forces in a theater in conformance with the theater strategy and strategic plans in addition to routine theater consumption.

Note: Applicable to this function is Distribute - To provide for the delivery of Class V supplies and services to joint/combined forces in conformance with the unified commander's strategy and strategic plans by employing transportation and supply services. It includes shifting the flow of Class V or redistributing Class V from less affected areas in the theater of war to support the main line(s) of operation in the theater strategy or campaign plan. This function is covered under the general function, 8.5 Distribute.

ST.8.2 Fuel. To provide for the uninterrupted flow of fuel (Class III) to joint/combined forces in conformance with the unified commander's strategy or campaign plans in addition to routine theater consumption.

Note: Applicable to this function is Distribute - To provide for the delivery of Class III supplies and services to joint/combined forces in a theater in conformance with the unified commander's strategy or campaign plans by employing transportation and supply services. It includes shifting the flow or redistribution of Class III in supporting the main thrust. This function is covered under the general function, 8.5 Distribute.

ST.8.3 Fix/Maintain Equipment. To provide for the establishment of facilities in rear areas for the repair and replacement of materiel and the establishment of policies on repair and evacuation of equipment in support of theater forces in unified operations or theater campaigns. This includes the concentration and provision of maintenance services, including recovery battle damage assessment and repair, and Class IX supplies for retaining theater of war forces in or restoring them to a high state of materiel readiness in preparation for sustaining the tempo of strategic operations in theater campaigns and routine COMMZ support.

Note: Applicable to this function is distribute - To provide maintenance services and Class IX supplies in support of theater forces in unified operations and theater campaigns and routine COMMZ maintenance activities by employing transportation and supply services. This function is covered under the general function, 8.5 Distribute.

ST.8.4 Man the Force. To provide the uninterrupted flow of trained, and organizationally sound army units and replacements and to provide necessary personnel and health services support in the theater for supporting theater strategy, campaigns and routine COMMZ support.

Note: Applicable to this function is distribute - To provide individual replacements, replacement units, Class I, II, VI, and VIII supplies (and water) and services, and other manpower related services to theater forces in support of theater strategy and campaigns and routine COMMZ manning activities by employing transportation and supply services. This function is covered under the general function, 8.5 Distribute.

ST.8.4.1 Provide Field, Personnel and Health Services. To provide field service and supply in support of the soldier (includes: food, water, personal welfare and comfort items; clothing and soldier equipment; laundry, bath, and renovation; graves registration, and air drop), personnel service support (includes: administration, finance, chaplain, public affairs, legal services and soldier support activities to include morale and welfare activities in the theater, e.g., rest and relaxation), and health service support (includes: prevention, medical and dental treatment and movement, hospitalization, return to duty, evacuation, medical logistics optometry and laboratory services) in preparing theater forces for unified

operations and theater level campaigns and routine COMMZ support, and for the sustainment of the tempo of operations once begun.

ST.8.4.2 Reconstitute Forces. To take extraordinary actions to restore combat-attrited units in the theater to a desired level of combat effectiveness commensurate with mission requirements and availability of resources. There are two types of reconstitution activities, reorganization and regeneration.

ST.8.4.3 Train Units and Personnel. To provide the means for training replacements and units, especially newly rebuilt units in the theater of war.

Note: For analyzing this function refer to the Force Development function, SN.1.6. Train the Force.

ST.8.4.4 Conduct Theater Reception Operations. To receive and prepare reinforcing units and individual replacements for further deployment and employment forward to theaters (or areas) of operations. Reception includes clearing air and sea ports of debarkation (PODS), moving unit personnel and equipment from PODS to marshalling areas, joining unit personnel (normally deployed by air) with their equipment (normally shipped by sea or prepositioned in storage sites), and the provision of supplies and support necessary to achieve readiness for onward movement.

Note: Several subfunctions of the Reception function are covered elsewhere in the theater strategic level Blueprint. Deployment of newly received forces is covered under Theater Strategic Movement and Maneuver. Protection of newly arrived forces as they pass through the sustainment base to theaters (or areas) of operations to their point of commitment is covered in the Theater Protection operating system.

ST.8.5 Distribute. To maintain the timely flow of stocks (all classes of supply in large quantities) and services (maintenance and manpower) to theater (or area) of operations operational forces using theater joint or combined transportation means (over ground, air, and sea lines of communications) in support of theater strategy and theater campaigns and normal theater COMMZ support operations. This includes distributing war reserve stocks in sufficient quantity and type and positioned in depth throughout the theater to support CINC warfighting strategies.

ST.8.5.1 Provide Movement Services. To move personnel, equipment, and supplies to sustain theater strategy, unified commander's campaigns and unified operations and to provide transportation resources for moving strategic forces into a position to execute those operations. This function includes the following: transportation mode operations; movement management and control; and terminal operations (including joint over the shore logistics).

Note: Transportation mode operations include moving cargo, equipment, and personnel by various modes of transport and providing transport resources in support of theater strategy and campaigns and strategic operations.

ST.8.5.2 Supply Theater Forces. To provide trained manpower, classes of supply, maps and water and related services for sustaining theater forces throughout a theater campaign or unified operation in the quantities and at the time and place needed. It includes requesting, receiving, producing, procuring, storing, protecting, relocating and issuing the manpower, supplies and services. It also includes building up the necessary stockage levels in staging areas for conducting a theater campaign or unified operation.

ST.8.6 Maintain Sustainment Base(s). To build and maintain principal and supplementary bases of support for theater sustainment functions in support of theater strategy and in conformance with national and alliance military policy, strategy and war plans.

ST.8.6.1 Determine Number and Location of Sustaining Bases. To establish theater of war lines of support and the location of sustaining bases so as to best support the unified commander's strategy and plans and subordinate operational commanders' campaign plans.

Note: A related function is allocate space and facilities, as available, in the theater rear (to include theater of war, theaters (and areas) of operations as well as the combat zone) for sustainment operations in conformance with the theater strategic concept and national/alliance objectives. This is a theater strategic C2 function.

ST.8.6.2 Provide Sustainment Engineering. To dismantle fortifications and to construct and maintain facilities and communications networks that give physical structure to the theater lines of communication thus setting the capacity of CSS organizations to provide materiel and services to subordinate commanders. This function includes the following: Building/maintaining theater forward staging bases; rear area restoration, LOC sustainment; construction support; and acquisition or production of construction materiel, all for the theater.

ST.8.6.3 Provide Law Enforcement and Prisoner Control. To provide collection, processing, evacuation and internment; and to enforce military law and order. Battlefield circulation control is analyzed under the transportation functions.

Note: The preferred way of providing support structure is through a combination of host nation, third country, contractor, and US civilian resources. Obtaining sustainment from other

sources is a function related to sustainment within the unified command. It refers to obtaining sustainment support from sources other than US Army CSS organizations and includes obtaining the following: host nation support, logistics civil augmentation, DA civilian support, and captured materiel. This function is analyzed under the Theater Strategic 2. Alliance and Regional Relations operating system.

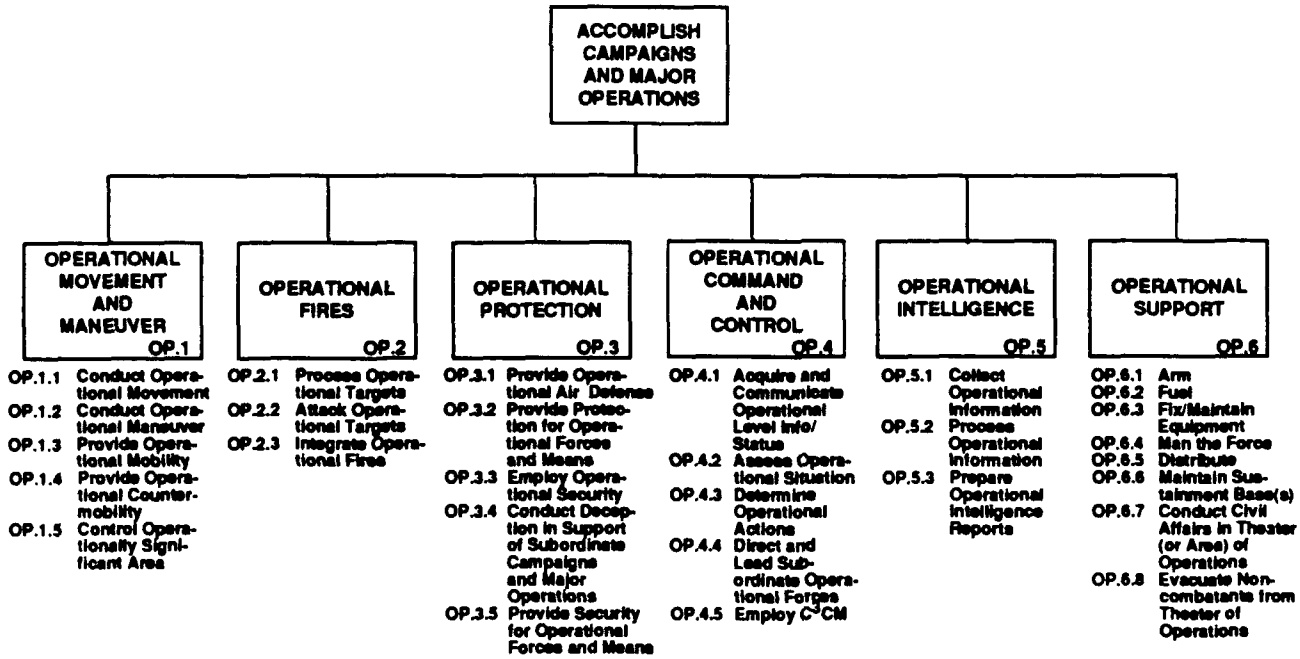
ST.8.7 Evacuate Noncombatants from Theater. To use all available means including commercial, theater military, host nation, and third country resources for the evacuation of US forces dependents, US government civilian employees and private citizens (US and 3d nation) from the theater. Theater organizations at various echelon provide support (e.g., medical, transportation, security, etc.) to the noncombatants; the support provided is analyzed under the appropriate function.

Appendix B

Blueprint for the Operational Level of War

This appendix lists and defines the six operational level of war operating systems and associated subfunctions. Individual index numbers are assigned to each and associated subfunctions. Functions in the Operational Blueprint use the prefix OP. The figure shown below summarizes the operational level operating systems and their major subfunctions for the user's ready reference.

Blueprint for the Operational Level of War - Summary



Appendix B

Blueprint for the Operational Level of War

Section I. Operational Movement and Maneuver

OP.1. Operational Movement and Maneuver. The disposition of joint and/or combined forces to create a decisive impact on the conduct of a campaign or major operation by either securing the operational advantages of position before battle is joined or exploiting tactical success to achieve operational or strategic results. It includes the functions of moving or deploying forces for operational advantage within a theater or area of operations and conducting maneuver to operational depths (for offensive or defensive purposes). It also includes functions for enhancing the mobility of friendly forces, degrading the mobility of enemy forces, and controlling a land, sea or aerospace area, for operational advantage. Movement and maneuver can be on sea, land, or through the air. Operational formations are actually composed of tactical forces moving to achieve operational or strategic objectives; as a shorthand they are referred to as operational formations or operational forces.

Note: Although scale alone does not make movement and maneuver operational, complex time and distance factors associated with movement planning and execution are critical to operational movement. These planning factors are analyzed under two functions in Operational Command and Control (C2), OP.4.1 Acquire and Communicate Operational Level Information and Maintain Status and OP.4.2 Assess Operational Situation. Also, Operational Movement and Maneuver can be used to support operational deception (OP.3.4).

OP.1.1 Conduct Operational Movement. To regroup, deploy, shift, or move, joint/combined operational formations within the theater of operations (or area of operations) from less threatened or less promising areas to more decisive positions elsewhere (i.e., the friendly position obtained relative to the enemy) by any means (joint, allied, host nation or third country) or mode (air, land or sea).

Note: The provision of augmentation transportation for operational movement from sources not organic to an operational formation are analyzed under the Operational Support of the Force function OP.6.5.1 Provide Movement Services and Operational C2 function OP.4.4.1.2 Coordinate Service Component, Theater Army and Other Support.

Operational Blueprint

OP.1.1.1 Formulate Request for Strategic Deployment of Joint/ Combined Forces to Theater of Operations. To prepare a request from operational commander to strategic commander for the strategic movement of joint/combined operational forces from outside the theater (or area) of operations in a way consistent with the operational commander's supporting campaign scheme, sequencing of operations, and his time-phased force deployment list.

Note: Although the request for forces during the transition from peace to war may be the responsibility of the strategic (theater of war) commander, there may be times during, before or in between campaigns or major operations that an operational commander requests additional forces to counter a threat to his own center of gravity or to take advantage of a tactical success beyond his current capability.

OP.1.1.2 Conduct Intra-Theater of Operations Deployment of Forces. To conduct the actual relocation or movement of operational forces by any means or mode of transportation from their position within a theater (or area) of operations to a forward staging area or position preparatory to deploying the force into combat formation in support of the operational commander's plan, i.e., deployment must support commander's desired dispositions.

OP.1.2 Conduct Operational Maneuver. To deploy joint and combined operational forces to and from battle formations and to extend forces to operational depths for achieving a position of advantage over the enemy for accomplishing operational or strategic objectives.

OP.1.2.1 Transition to and from Tactical Battle Formations. To extend (or withdraw from) joint/combined operational forces in width and/or depth to increase tactical readiness for battle in conformance with the operational commander's campaign or major operation plan and to facilitate the tactical commander's plan and intent.

OP.1.2.2. Posture Forces for Operational Formations . To group forces and means into operational formations for the conduct of major operations and campaigns. Operational formations must support the commander's concept and provide for the effective use of all elements of the force, a capability for maneuvering and increasing the strength of forces and means during the operation, a rapid transformation from one type of operation to another without the loss of momentum or effectiveness, the conduct of continuous operations, and the protection of the force.

Note: Operational formation may consist of several echelons of combined arms organizations (e.g., tank, artillery, theater air forces, grouping of air defense forces, special operating forces, engineers, reserves of various types, and support forces. A commander can use posturing to deceive the enemy of his true intentions.

OP.1.2.3 Conduct Operations in Depth . To conduct offensive and/or defensive operations to operational depths in achieving a position of advantage for the defeat or neutralization of enemy operational forces in order to accomplish operational or strategic objectives.

Note: Function 1.2.2 Conduct Operations in Depth can accommodate various types of operational maneuver, offensive or defensive. Offensive operations might include penetration(s), encirclement(s), exploitation and pursuit (e.g., the Soviet Belorussian operation, Operation Bagration, summer 1944). Defensive operations might include large-scale counterattacks (e.g., Allied counterattacks to reduce the bulge created by Hitler's Ardennes counteroffensive in winter 1944-1945).

OP.1.3 Provide Operational Mobility. To facilitate the movement of joint and combined operational formations in a campaign or major operation without delays due to operationally significant terrain or obstacles.

OP.1.3.1 Overcome Operationally Significant Obstacles. To preserve freedom of operational movement by counteracting the effects of natural (existing) and other (reinforcing) operationally significant obstacles.

Note: Operationally significant terrain and obstacles include ports, transportation systems, major land formations (e.g., mountain ranges, major rivers, river deltas, marshlands), thick forests, and urban areas.

OP.1.3.2 Enhance Movement of Operational Forces. To prepare or improve facilities (e.g., air fields, landing zones) and routes (e.g., roads, railroads, canals, rivers, ports) of travel for moving operational forces in support of campaigns and major operations.

Note: This function pertains only to that movement directly related to operational movement (see function, OP.1.2 Conduct Operational Movement). Maintenance of transportation modes and LOCs is addressed under Operational Support of the Force.

OP.1.4 Provide Operational Countermobility. To delay, channel, or stop offensive air, land, and sea movement by enemy

operational formations in order to help create positional advantage for friendly joint and combined operational forces and expose enemy centers of gravity or high payoff targets to destruction in conformance with the operational commander's plans and intent.

OP.1.4.1 Select Location for Operational Obstacles. To identify air, land, and sea sites for reinforcing or constructing obstacles to take maximum advantage of existing obstacles to form a system of obstacles (normally on a large scale) for operational effect while providing flexibility to friendly movement and increasing the variety of obstacles the enemy must encounter.

OP.1.4.2 Emplace Operational Systems of Obstacles. To develop existing obstacles and reinforce terrain (includes air, land, and sea) with countermobility means (e.g., minefields, ADM, demolitions) for achieving operational results in support of campaigns and major operations.

OP.1.5 Control Operationally Significant Area. To dominate the physical environment (land, sea, air, and space) whose possession provides either side an operational advantage, thus denying it to the enemy by either occupying the operationally key area itself or by limiting his use or access to the environment or area. For an area or environment to be operationally key, its dominance must achieve operational or strategic results or deny same to the enemy.

Note: With respect to land operations, such an environment would be operationally key terrain which could be controlled by occupying the terrain itself or blocking positions to deny access. However, this function is not restricted to land surfaces.

Section II. Operational Fires

OP.2. Operational Fires. The application of firepower to achieve a decisive impact on the conduct of a campaign or major operation. Operational fires are by their nature primarily joint/combined activities or functions. They are a separate component of the operational scheme and the coequal of operational movement and maneuver, but maneuver and fires must be integrated. Operational fires are not fire support, and operational maneuver is not dependent on such fires. Operational maneuver can be affected by operational fires.

Note: Today, operational fires are normally furnished by assets other than those required for the routine support of tactical maneuver; but as the range of those assets now used to support tactical maneuver increases, those same assets will play a more significant role in the delivery of operational fires. Planning for operational fires is part of the Operational Command and Control function, 4.3 Determine Operational Actions, in which the operational commander integrates joint and allied capabilities into a coherent theater (or area) of operations campaign plan with supporting land, naval and air campaign plans. Also, see OP.4.5 Employ C3CM in the Operational C2 operating system.

OP.2.1 Process Operational Targets. To select land, sea, and air targets of major/decisive impact on campaigns and major operations and match appropriate joint or allied operational fires.

OP.2.1.1 Select Operational Targets for Attack. To evaluate each operational target to determine if and when it should be attacked for optimum effect on enemy centers of gravity and own commander's intent.

Note: Important associated functions are found under Intelligence and C2, respectively. Air targets include offensive counterair but do not include air defense or defensive counterair targets; these are covered in Operational Protection (OP.3.1 Provide Operational Air Defense). Included here are the destruction and degradation of enemy C3CM means which include EW.

OP.2.1.2 Allocate Joint/Combined Operational Fires Resources. To apportion operational fires resources for the priority employment of joint and allied fire systems on operational targets according to the operational commander's plan and intent.

OP.2.2 Attack Operational Targets. To enter into conflict with the enemy to destroy operational level targets and to shape and control the tempo of campaigns using all available joint and

allied operational fires assets (includes naval; air; space; ground long-range cannon, rockets and missiles; SOF; conventional and special munitions) against land, air and naval (surface and subsurface) targets having operational significance.

OP.2.2.1 Conduct Lethal Attack on Operational Targets. To engage operational land, sea, air, and space targets (air targets other than air defense or defensive counterair targets) with available joint and allied operational fires delivery systems to delay, disrupt, destroy, or degrade enemy operational forces or critical functions and facilities (including C3I targets) and to affect his will to fight.

OP.2.2.1.1 Conduct Attack with Surface/Subsurface-based Operational Fires. To employ surface and subsurface land and sea based joint and combined operational fires to destroy, suppress, or neutralize enemy operational forces (including air forces on the ground, and enemy naval forces), fortifications, and critical functions and facilities.

OP.2.2.1.2 Conduct Aerospace Operational Fires Attack. To employ joint/combined air and/or space forces (including helicopters, UAV, space vehicles, etc) operational fires to destroy, suppress, or neutralize enemy operational targets. This function includes the attack of offensive counter-air targets.

OP.2.2.2 Conduct Nonlethal Attack on Operational Targets. To engage operational land, sea and air (less air defense) targets with joint and combined means designed to impair, disrupt or delay the performance of enemy operational forces, functions and facilities. The means include the use of psychological operations, special operations forces, chemical contamination of equipment and facilities, electronic warfare (jamming) and other Command, Control, Communications Countermeasures (C3CM).

OP.2.2.2.1 Reduce Enemy Operational Force Effectiveness. To create delays in enemy operational movement, disrupt enemy command and control, degrade human and equipment performance, and affect the enemy force's will to fight. Means include psychological operations.

OP.2.2.2.2 Reduce Enemy Critical Facilities Effectiveness. To use special operations forces, non-lethal chemical and electronic warfare with the object of degrading, disrupting, or temporarily impairing critical functions or facilities.

OP.2.3 Integrate Operational Fires. To integrate operational fires on single or multiple operational targets at the decisive time and place. This integration includes lethal and/or nonlethal attacks to include friendly C3CM and EW measures and minimizing their effect on friendly C3I.

Section III. Operational Protection

OP.3. Operational Protection. The conservation of the fighting potential of a force so that it can be applied at the decisive time and place. It includes actions taken to counter the enemy's firepower and maneuver by making soldiers, systems, and operational formations difficult to locate, strike, and destroy. Operational protection includes protecting joint and combined air, space, land and sea forces, bases, and LOCs from enemy operational maneuver and concentrated enemy air, ground, and sea attack and natural occurrences.

Note: Some subfunctions associated with the protection, or survivability, of the force are included under other related Operational level Operating Systems. Survivability and protection functions regarding soldier health and welfare are covered in the operational support function OP.6.4.2 Provide Field, Personnel, and Health Services. Dispersion and mobility actions are covered in operational movement and maneuver functions OP.1.2 Conduct Operational Maneuver and OP.1.3 Provide Operational Mobility. Offensive counter-air activities are included under operational fires. Operational protection includes C3-protection - That division of C3CM comprising measures taken to maintain the effectiveness of friendly C3 despite both adversary and friendly counter-C3 actions. Also, see OP.4.5.2 Protect Friendly C3 under the Operational C2 operating system.

OP.3.1 Provide Operational Air Defense. The protection of operational forces from air attack (including attack from or through space) through both direct defense and destruction of the enemy's air attack capacity in the air. It includes such measures as use of aircraft (includes helicopters), interceptor missiles, air defense artillery, non-air defense weapons in an air defense role, and electronic countermeasures.

Note: This operating system pertains to defensive counter-air activities. Offensive counter-air activities are included under Operational Fires. At the operational level of war, air defense concerns protecting critical points and facilities (e.g., ports, key bridges, operational command and control facilities) in the COMMZ (operational commander's AO), support forces in the COMMZ, and forces transiting the COMMZ, or critical facilities in the combat zone with operational significance. It also includes the protection of operational force formations in moving to a major operation or campaign to the point of concentration for deployment to battle (tactical) formation and during operational maneuver. Operational air defense is always joint and can be a combined activity.

OP.3.1.1 Process Operational Air Defense Targets. To select offensive air threats to the operational environment and match appropriate response to ensure freedom of action for campaigns and major operations and protection of key assets.

Note: Applicable to this function is the provision of early warning of air attack, i.e., to reduce the threat from surprise air attack on operational forces and facilities by use of sensors and indications of imminent hostile activity before it would be otherwise detected by the air defense environment. This function is covered in Operational Intelligence, under OP.5.2.4 Develop Indications and Warning.

OP.3.1.1.1 Allocate Targets for Attack. To designate specific targets to operational air defense forces (land, sea, and air-includes space) for interception or engagement.

OP.3.1.1.2 Integrate Joint/Combined Operational AD Forces. To achieve a balanced mix of all available joint and allied operational air defense forces (aircraft, missiles, ADA) of air, land, and naval components.

OP.3.1.2 Provide Airspace Control. To provide safe, efficient, and flexible use of airspace (includes space).

OP.3.1.2.1 Employ Positive Control Measures. To establish direct controls that minimize mutual interference between operational air defense and other operations.

OP.3.1.2.2 Employ Procedural Control Measures. To establish readily identifiable electronic, visual, or other means of identification critical to survival of friendly aircraft in event positive control measures fail.

Note: Applicable to this function is the identification of friend or foe, i.e., to establish hostile criteria for early separation of friend and foe to permit maximum beyond-visual-range engagement and avoid fratricide. This is covered in the Operational Intelligence function, OP.5.2.4 Develop Indications and Warning.

OP.3.1.3 Attack Enemy Air Defense (AD) Targets. To intercept, engage, destroy or neutralize enemy operational air formations (includes aircraft, missiles and space vehicles) in flight using all available air defense capabilities of all friendly forces to achieve operational results.

Note: The provision of rules of engagement for establishing standard control procedures applicable to combat engagements with other forces is covered under Operational Command and Control in

Operational Blueprint

OP.4.3 Determine Operational Actions and in OP.4.4.1 Prepare Campaign and Support Plans or Orders.

OP.3.1.3.1 Conduct Lethal Attack on Operational AD Targets. To employ air-to-air (includes space systems and armed helicopters), surface-to-air, and subsurface-to-air joint and combined operational forces as early and as far forward as possible to protect friendly operational air, land, and sea forces by attacking enemy operational air defense targets in support of campaign plans, major operations and forces in the COMMZ. It includes forces and facilities in the COMMZ and operationally significant facilities in the combat zone.

OP.3.1.3.2 Conduct Nonlethal Attack on Operational AD Targets. To employ supplementary means such as mass jamming, electronic support measures, and chemical agents and contaminants to deny, disrupt, and degrade enemy air attack sensors, guidance systems, and C3 systems.

OP.3.2 Provide Protection for Operational Forces and Means. To safeguard own center(s) of gravity and operational force potential by reducing or avoiding the effects of enemy operational level actions (includes movement, and radio electronic combat).

OP.3.2.1 Prepare Operationally Significant Fortifications. To provide protective construction hardening for operational forces and key facilities (e.g., command and control, logistic, and rear area positions and fighting positions).

OP.3.2.2 Remove Operationally Significant Hazards. To eliminate the presence of hazards which adversely affect execution of the operational commander's plan.

OP.3.2.3 Protect Use of Electromagnetic Spectrum. To take actions to insure friendly effective use of the electromagnetic spectrum despite the enemy's use of electronic warfare. This is a division of electronic warfare and also called ECCM.

OP.3.3 Employ Operations Security. To take action to avoid friendly force indicators associated with planning and conducting campaigns and major operations from the enemy commander's perspective and thus protecting friendly intentions.

OP.3.3.1 Employ Signal Security (SIGSEC). To protect emitters and information transmitted through friendly operational command and control communications electronic systems from enemy exploitation.

OP.3.3.2 Employ Concealment Techniques. To provide protection of operational forces and facilities from enemy observation and surveillance sensors.

OP.3.3.3 Avoid Operational Patterns. To vary activities and ways of conducting operations to avoid predictable patterns which are vulnerable to enemy interception.

OP.3.4 Conduct Deception in Support of Subordinate Campaigns and Major Operations. To manipulate enemy operational commander's perceptions and expectations into a false picture of reality that conceals friendly actions and intentions until it is too late for enemy operational forces to react effectively within the context of the theater commander's deception plan. Several measures are available to a commander for conducting deception to include: physical, technical or electronic (imitative, manipulative, and simulative), and administrative.

Note: Users are referred to related functions located elsewhere in the Operational Blueprint. These related functions include the following: OP.3.3 Employ OPSEC; OP.3.5 Provide Security for Operational Forces; OP.5. Operational Intelligence (intelligence support for deception planning and supervision); OP.4. Operational C2 (various organizing, planning and directing functions, and resource allocation).

OP.3.4.1 Protect Details of Campaigns and Major Operations. To take actions to prevent the enemy from learning the true intent of the operational commander's campaigns and major operations plans and deception plans. This function includes limiting to the last possible moment the number of people aware of friendly plans; delaying or masking operational movements and preparations; deceiving friendly leaders and soldiers where necessary; other appropriate actions.

OP.3.4.2 Spread Misinformation Regarding Conduct of Campaigns and Major Operations. To develop and disseminate the deception plan and story, consistent with the strategic deception plan, focused on enemy's expectations, preconceptions, and fears concerning friendly intent in order to deceive the enemy operational commander of the true friendly intentions regarding the campaigns and major operations. Deception plan will utilize the entire joint and combined operational forces and strategic means, as appropriate, for deceiving the enemy.

Note: The movement and maneuver of operational forces for deception purposes will be analyzed under the functions OP.1.1 Conduct Operational Movement and OP.1.2 Conduct Operational Maneuver.

OP.3.4.3 Assess Effect of Operational Deception Plan. To determine the extent to which the deception story and related actions have had on the plans and actions of the opposing operational commander and his staff.

Note: The organization responsible for deception planning and supervision requires intelligence support; those activities relating to intelligence support or operational deception should be analyzed under the function OP.4. Operational Intelligence. The function, friendly counterdeception, is included in the Operational Intelligence operating system under the function OP.5.2.5 Identify Friendly Vulnerabilities.

OP.3.5 Provide Security for Operational Forces and Means. To enhance freedom of action by identifying and reducing friendly vulnerability to hostile acts, influence, or surprise. It includes measures to protect from surprise, observation, detection, interference, espionage, and sabotage. This function includes actions for protecting and securing the flanks of operational formations and protecting and securing critical installation, facilities, and systems.

Section IV. Operational Command and Control

OP.4. Operational Command and Control. The exercise of authority and direction by a properly designated commander over apportioned operational forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by an operational commander in planning, directing, coordinating, and controlling forces in conducting campaigns and major operations in the accomplishment of the mission.

Note: 1) Operational command and control will almost always be a joint and often a combined command structure. Sometimes it is uniservice. The assignment of missions, areas of responsibility, and resources plus the establishment of command relationships are critical elements of the operational commander's command and control system. 2) Planning for campaigns generally follows the normal decision making process for commander and staff actions, e.g., that found at the tactical level. However, campaign plans are normally of such scope in time and space that a deliberate planning process is followed. There are occasions when major operations, especially in response to enemy actions preclude long and deliberate planning by an operational commander. 3) C2 is a cyclical and continuous process; therefore the functions are only listed once. 4) The term "Operational Command and Control" is used as a shorthand term for "Operational Level of War Command Control" and should not be confused with the terms "Operational Command" or "Operational Control." 5)In some literature, reference is made to C3I and in others C2 where C2 (command and control) includes communications. As is done in the Army's C2 Operational Concept, the use of C2 subsumes communications. Intelligence is retained as a separate function (See OP.5. Operational Intelligence), therefore C3I is not used except for convenience when discussing a certain type of target (i.e., C3I target).

OP.4.1. Acquire and Communicate Operational Level Information and Maintain Status. To gain possession of information on the theater of operations military objective, enemy operational forces and centers of gravity, friendly operational forces, terrain and weather (includes characteristics of area of operations, climate), by or for the operational commander or his staff, to translate that information into usable form, to retain, and to disseminate it. It includes informing and advising the theater of war commander and securing an understanding of strategic guidance or an understanding of national and alliance policy, objective(s) and strategic aim, other elements of national and multi-national power (e.g., political, economic, informational), and theater strategic objectives. At the operational level this

function includes interfacing with friendly and enemy (in occupied territory) civilian government authorities in the operational commander's SEICHE.

OP.4.1.1 Communicate Operational Information. To send and receive operationally significant data from one echelon of command to another by any means.

OP.4.1.2 Manage Means of Communicating Operational Information. To direct, establish, or control the means used in sending or receiving operational information, and to use communication networks and modes for obtaining or sending operational information.

Note: This function includes the requirements for operational level command and control systems, as subordinate unified commands and joint task forces (when established), to operate within the Worldwide Military Command and Control System and the Joint Operational Planning and Execution System as part of the National Military Command System. This does not refer to established CINCs (e.g., CINCEUR and CINCLANT) who are at the theater of war, or strategic level. However, it does refer to their subordinate operational level commands (e.g., a theater of operations commander under SACEUR, or a JTF under CINCLANT, or a subordinate service or functional component of these commands).

OP.4.1.3 Maintain Operational Information and Force Status. To screen, circulate, store, and display operational data in a form suitable for the decision making process of the operational commander and his staff.

OP.4.1.4 Monitor Strategic Situation. To be aware of and to understand national and alliance objectives, policy, goals, other elements of national and alliance power (e.g., political, economic, informational), political aim, and the theater of war commander's strategic concept and intent.

OP.4.2 Assess Operational Situation. To continuously evaluate information received through reports or the personal observations of the commander on the general situation in the theater (or area) of operation and conduct of the campaign or major operation. In particular, it includes deciding whether different actions are required from those that would result from the most recent orders issued.

OP.4.2.1 Review Current Situation. To examine on-hand operational information. This function includes analyzing the assigned mission (includes assigned strategic military objectives) and related tasks in the context of the next higher echelon's campaign plan or operational order and the strategic aim,

and the combining of on-hand with incoming information while separating critical from noncritical information.

OP.4.2.2 Project Future Campaigns or Major Operations. To see beyond immediate battles and estimate enemy's future actions, and to anticipate own actions for employment of operational forces after each phase of a current campaign or major operation (sequels) to include consideration of possible local reversals or tactical failures.

OP.4.2.3 Decide on Need for Action or Change. To decide whether actions are required which are different from those which operational forces have already been directed to execute.

OP.4.3 Determine Operational Actions. To conduct the process of making detailed staff estimates and decisions for implementing the theater of war commander's theater strategy and campaign plan(s) and associated sequels, and anticipated campaigns or major operations.

Note: Plans and orders address, among other things, centers of gravity, branches, sequels, culminating points and phasing. In addition to addressing the campaign or major operation, planning should address problems related to joint and combined forces, e.g., organization of an effective staff; structuring and organizing the force; consideration of allied capabilities/limitations; and cross-leveling or balancing service and national C2 means. Planning also should address rules of engagement for fires, maneuver, air defense, etc.

OP.4.3.1 Issue Planning Guidance. To establish guidance for planning tasks to be accomplished by subordinate commands and the operational commander's staff. This includes initial and subsequent planning guidance.

OP.4.3.2 Develop Courses of Action. To anticipate and define multiple, feasible employment options within the framework of the next senior commander's concept.

OP.4.3.3 Analyze Courses of Action. To examine or wargame each course of action to determine its advantages and disadvantages. Each friendly course of action is wargamed against each of the enemy courses of action.

OP.4.3.4 Compare Courses of Action. To analyze the various courses of action against each other by either comparing the advantages and disadvantages of each course of action previously analyzed, or to isolate and compare decisive significant factors that are selected based on each situation.

OP.4.3.5 Select or Modify Course of Action. To decide on the course of action which offers the best prospect for success (FM 101-5, pg. E-8). This function also includes modifying a course of action previously selected and is therefore a continuous process.

Note: The other options potentially become sequels and contingencies to phases of the operation, which enable the operational commander to respond rapidly to changing situations.

OP.4.3.6 Finalize Commander's Concept and Intent. To restate the mission (includes assigned strategic military objectives), develop the concept of operations (movement and fires), give clear statement of initial commander's intent (aim of entire campaign or major operation), and derive subordinates' tasks and objectives. It includes air, land and sea forces. The concept of operations could include: allocation of forces, phasing, means of reinforcing maneuver, fires, tactical air force requirements, priorities by phase, naval support, use of space (and space systems), SOF employment, special weapons employment, and deception. Special types of operations (e.g., amphibious) may include other elements.

OP.4.4 Direct and Lead Subordinate Operational Forces. To establish a command climate which provides direction to subordinates such that they understand their mission and military objectives and their contribution to attainment of the commander's concept and intent and assigned strategic military objectives. It includes maximum decentralized conduct of campaigns and major operations, either detailed or mission-type plans and orders as time and situation permits, latitude for subordinate innovative risk taking and exploitation of opportunities or deliberate contemplative action as the theater and national situation dictate.

OP.4.4.1 Prepare Campaign or Major Operations Plans and Orders. To develop a plan or order which executes the concept and intent of the theater of war commander's campaign plan.

Note: There is no attempt here to include each and every element of a sound plan for a campaign or major operation. For example, the organization of the operational force for the campaign or major operation would be a critical part of the plan but is not included here.

OP.4.4.1.1 Develop and Complete Operational Plans and Orders To finalize orders or plans prior to approval and issuance.

OP.4.4.1.2 Coordinate Service Component, Theater Army and Other Support. To coordinate with allies and the U.S. service component commands, theater army commander, adjacent, subordinate, higher and supporting organizations to ensure cooperation and mutual support, a consistent effort and mutual understanding of the operational commander's priorities, support requirements, concept and intent, and objectives. It includes but is not limited to concept, sustainment support, supporting air (e.g., allocating assets and targets) and naval campaign plans. Coordination of air, land, and sea support begins early in the process.

OP.4.4.1.3 Approve Plans and Orders. To obtain the operational commander's approval and the next higher commander's approval of fully rationalized joint/combined plans and orders prior to issuance.

OP.4.4.2 Issue Plans and Orders. To submit orders and plans for transmission to subordinate, supporting or attached units for execution and to adjacent and higher units for coordination. The transmission of the orders and plans by any means is part of the function, OP.4.1.1 Communicate Operational Information.

OP.4.4.3 Provide Operational Command Presence. To position the operational commander so as to infuse among subordinates his will and intent or otherwise achieve the operational or strategic objectives of the campaign or operation.

OP.4.4.4 Synchronize Operations. To arrange land, air and sea operational forces in time, space and purpose to produce maximum relative combat power at the decisive point. It includes the vertical integration of functions within each operating system and the horizontal integration of the functions across operating systems in time and space to maximize combat output. Synchronization is the function that ensures that all elements of the operational force are efficiently employed to maximize the sum of their effects beyond the sum of their individual capabilities.
Note: It is this function that, if effectively executed, permits the friendly operational commander to get inside the enemy commander's decision cycle and smaller forces to defeat larger forces.

OP.4.5 Employ Command, Control, Communications Countermeasures (C3CM). To integrate the use of operations security, military deception, jamming, and physical destruction, supported by intelligence, to deny information, to influence, degrade, or destroy adversary command, control, and communications (C3) capabilities and to protect friendly C3 against such actions. Employ C3CM includes two component functions, deny enemy

effective C3 of his own forces (also called counter-C3) and protect friendly C3 (also called C3-protection).

Note: Applicable to this function are a number of functions covered elsewhere in the Operational Blueprint. For counter-C3 see functions for selecting targets and means of engagement (OP.2.1), deception (OP.3.4), and degrading or destroying enemy C3I (OP.2.2). For C3-protection see the functions for employing OPSEC (OP.3.3), using camouflage and other survivability measures (OP.3.2 and OP.3.3), conducting ECCM (OP.3.2.3), and minimizing the effect of friendly C3CM on friendly C3I (OP.2.3). For intelligence support of C3CM see the operating system, OP.5 Operational Intelligence.

Section V. Operational Intelligence

OP.5. Operational Intelligence. That intelligence which is required for the planning and conduct of subordinate campaigns and major operations within a theater (or area) of operations. At the operational level of war, the joint and combined intelligence system concentrates on the collection of information, and the analysis of that information, which will lead to the identification and location of the operational center(s) of gravity (or high payoff targets affecting the centers of gravity) that, if successfully attacked, will achieve the assigned strategic aim(s).

Note: Operational intelligence includes determining when, where, and in what strength the enemy will stage and conduct campaigns and major operations. It also includes providing intelligence support for friendly C3CM (See OP.4.5 Employ C3CM).

OP.5.1 Collect Operational Information. To gather information from U.S. and allied operational, strategic and tactical sources relative to threat operational forces and their center(s) of gravity (and related high payoff targets), and to the nature and characteristics of the assigned area of operations (includes area of interest).

OP.5.1.1 Collect Information on Enemy Operational Situation and Hazards. To obtain information on enemy operational force vulnerabilities, threat operational doctrine and forces (land, sea, and air) dispositions and order of battle, and the nature and characteristics of the area of operations to include significant hazards (e.g., NBC contamination of large areas).

Note: The nature and characteristics of the area include the structure and limitations of the theater (or area) of operations and the operational area of interest. It also includes significant political, economic, industrial, geographic, demographic, topographic, hydrographic, climatic (weather, terrain, etc), cultural, and psychological features of the area of interest. Threat includes threat allies.

OP.5.1.2 Collect Information on Operational Targets. To obtain information that supports the detection, identification, and location of enemy strategic or operational centers of gravity and high-payoff targets whose attack will lead directly or indirectly to the defeat of the enemy. Assessing damage to operational targets is included under this function.

OP.5.2 Process Operational Information. To convert operational information into intelligence through collation, evaluation, analysis, integration, and interpretation.

Note: This function includes the evaluation of threat joint and combined operational land, sea and air forces, the nature and characteristics of the area of operations (to include the operational commander's area of interest), and integration of threat information to determine operational and strategic centers of gravity. This function also includes assessing enemy C3CM capabilities, actions and vulnerabilities.

OP.5.2.1 Evaluate Operational Threat Information. To continuously analyze the enemy in terms of its, mobilization potential, military-strategic and operational organization (including alliance forces) and dispositions, doctrine, capabilities, command and control structure and decision-making processes. This evaluation includes continuous refinement of the order of battle for the entire array of the joint and combined forces available to the enemy operational commander, personalities and history of performance, and the doctrine for employment of operational forces. Assessment of enemy C3CM capabilities is included here.

OP.5.2.2 Analyze Area of Operations. To conduct an analysis of the nature and characteristics of the theater (or area) of operations to determine the types and scale of operations the area will support and the impact of significant regional features and hazards on the conduct of both friendly and enemy campaigns or major operations. The analysis includes the impact of strategic limiting factors (e.g., rules of engagement) and determination of the operational commander's area of interest. Significant regional features include political, economic, industrial, geographic, demographic, topographic, hydrographic, climatic (weather, terrain, etc), cultural, lingual, historical and psychological features of the area. It also includes analysis of significant alterations to the area of operations which create operationally significant hazards (e.g., NBC contamination of large areas).

OP.5.2.3 Integrate Operational Intelligence. To develop operational level, time phased intelligence by combining data from the evaluation of the nature and characteristics of the area and the analysis of the threat to yield the enemy commander's intentions, center(s) of gravity, and high-payoff targets.

OP.5.2.3.1 Develop Enemy Operational Intentions. To form patterns from significant events, enemy national and alliance issues, or enemy operational commander's style which signal probable enemy operational intentions and probable courses

of action thus revealing high-payoff targets or center(s) of gravity for attack.

OP.5.2.3.2 Develop Operational Target Information. To provide timely and accurate locations of enemy operational forces that will impact current and future campaigns and major operations. Target data is derived from national, joint and combined sources and identifies high-payoff targets that, if attacked, will lead to the defeat of enemy centers of gravity. This target information development includes enemy C3CM targets.

OP.5.2.3.3 Identify Enemy Vulnerabilities. To identify for exploitation patterns of significant events and activities, military and political issues, alliance relationships and campaign styles of adversary operational commanders.These vulnerabilities include forces to be targeted for C3CM , EW and deception operations, and security weaknesses.

OP.5.2.4 Develop Indications and Warning. To determine changes in the military, political, economic, social, and diplomatic behavior of the enemy that could lead to hostile activity to preclude strategic surprise.

OP.5.3 Prepare Operational Intelligence Reports. To formulate operational intelligence estimates and reports on the threat operational situation, intentions, vulnerabilities, targets (to include high payoff targets and enemy centers of gravity), characteristics of the theater of operations/area of operations, other appropriate intelligence reports.

Note: See OP.4.1.1 Communicate Operational Information for the function of disseminating intelligence.

Section VI. Operational Support

OP.6 Operational Support. Those logistical and other support activities required to sustain the force in campaigns and major operations within a theater (or area) of operations. Operational sustainment extends from the theater of operations sustaining base (COMMZ) or bases, or forward sustaining base(s) in a smaller theater, to the forward CSS units, resources and facilities organic to major tactical organizations. This theater of operations sustaining base, in performing its support functions, links strategic sustainment to tactical CSS.

Note: Operational Support is almost always a joint effort. It is often a combined effort. It includes sustaining the tempo and continuity of operations throughout a campaign or major operation. There are functions related to sustainment that are included under functions in the Command and Control operating system, e.g., setting priorities; establishing stockage levels; managing critical materials; and obtaining support from civilian economy.

OP.6.1 Arm. To provide for the replenishment of arms, ammunition, and equipment required for supporting US Army, other US Services, and allied operational forces in conformance with the operational commander's campaign or major operations plans in addition to routine theater consumption.

Note: Applicable to this function is Distribute - To provide for the delivery of Class V supplies and services to joint/combined operational forces in conformance with the operational commander's campaign/major operations plans by employing transportation and supply services. It includes shifting the flow of Class V or redistributing Class V from less affected areas to support the main line(s) of operation. This function is covered under the general function, OP.6.5 Distribute.

OP.6.2 Fuel. To provide for the uninterrupted flow of fuel (Class III) to joint/combined operational forces in conformance with the operational commander's campaign or major operations plans in addition to routine theater consumption.

Note: Applicable to this function is Distribute - To provide for the delivery of Class III supplies and services to joint/combined operational forces in conformance with the operational commander's campaign/major operations plans by employing transportation and supply services. It includes shifting the flow or redistribution of Class III in supporting the main thrust. This function is covered under the general function, OP.6.5 Distribute.

OP.6.3 Fix/Maintain Equipment. To provide for the establishment of facilities in rear areas for the repair and replacement of materiel and the establishment of policies on repair and evacuation of equipment in support of operational forces in campaigns and major operations. This includes the concentration and provision of maintenance services, including recovery battle damage assessment and repair, and Class IX supplies for retaining operational forces in or restoring them to a high state of materiel readiness in preparation for sustaining the tempo of operations in campaigns, major operations, and routine COMMZ support.

Note: Applicable to this function is distribute - To provide maintenance services and Class IX supplies in support of operational forces in campaigns, major operations and routine COMMZ maintenance activities by employing transportation and supply services. This function is covered under the general function, OP.6.5 Distribute.

OP.6.4 Man the Force. To provide the uninterrupted flow of trained, and organizationally sound army units and replacements and to provide necessary personnel and health services support in the theater of operations for supporting campaigns and major operations and routine COMMZ support.

Note: Applicable to this function is distribute - To provide individual replacements, replacement units, Class I, II, VI, and VIII supplies (and water) and services, and other manpower related services to operational forces in support of campaigns, major operations and routine COMMZ manning activities by employing transportation and supply services. This function is covered under the general function, OP.6.5 Distribute.

OP.6.4.1 Provide Field, Personnel and Health Services. To provide field service and supply in support of the soldier (includes: food, water, personal welfare and comfort items; clothing and soldier equipment; laundry, bath, and renovation; and graves registration), personnel service support (includes: administration, finance, chaplain, public affairs, legal services and soldier support activities), and health service support (includes: prevention, treatment and movement, hospitalization, return to duty, evacuation, veterinary and laboratory services) in preparing operational forces for campaigns, major operations, routine COMMZ support, and for the sustainment of the tempo of operations once begun. This function includes providing rest and relaxation (R&R) within an operational commander's responsibility.

OP.6.4.2 Reconstitute Forces. To take extraordinary actions to restore combat-attritted units to a desired level of combat effectiveness commensurate with mission requirements and availability of resources. There are two types of reconstitution activities, reorganization and regeneration.

OP.6.4.3 Train Units and Personnel. To provide the means for training replacements and units, especially newly rebuilt units in the theater of operations.

OP.6.4.4 Conduct Theater of Operations Reception Operations. To receive and prepare reinforcing units and individual replacements for further deployment and employment. Reception includes clearing air and sea ports of debarkation (PODS), moving unit personnel and equipment from PODS to marshalling areas, joining unit personnel (normally deployed by air) with their equipment (normally shipped by sea or prepositioned in storage sites), and the provision of supplies and support necessary to achieve readiness for onward movement.

Note: Several subfunctions of the Reception function are covered elsewhere in the operational level Blueprint. Deployment of newly received forces is covered under Operational Movement and Maneuver. Protection of newly arrived forces as they pass through the sustainment base to their point of commitment is covered in the Protection operating systems.

OP.6.5 Distribute. To maintain the timely flow of stocks (all classes of supply in large quantities) and services (maintenance and manpower) to operational forces using joint or combined transportation means (over ground, air, and sea lines of communications) in support of campaigns and major operations and normal Theater Army (TA) support operations.

OP.6.5.1 Provide Movement Services. To move personnel, equipment, and supplies to sustain campaigns and major operations and to provide transportation resources for moving operational forces which execute those operations. This function includes the following: transportation mode operations; movement management and control; and terminal operations.

Note: Transportation mode operations include moving cargo, equipment, and personnel by various modes of transport and providing transport resources in support of campaigns and major operations. However, analysis of the movement of forces is done in Operational Movement and Maneuver under the functions, OP.1.1 Conduct Operational Movement and OP.1.2 Conduct Operational Maneuver. Also, movement management and control, although inherent to movement services, is a command and control function analyzed under Operational Command and Control.

OP.6.5.2 Supply Operational Forces. To provide trained manpower, classes of supply, maps and water and related services for sustaining operational forces throughout a campaign or major operation in the quantities and at the time and place needed. It includes requesting, receiving, producing, procuring, storing, protecting, relocating and issuing the manpower, supplies and services. It also includes building up the necessary stockage levels in staging areas for conducting the campaign.

OP.6.6 Maintain Sustainment Base(s). To build and maintain principal and supplementary bases of support for theater of operations sustainment functions in conformance with theater of war commander's guidance.

OP.6.6.1 Recommend Number and Location of Sustaining Bases. To provide expertise to theater of war commander on lines of support and the suggested location for sustaining bases so as to best support the operational commander's campaign plans.

Note: A related function is allocate space and facilities, as available, in the theater of operations rear (as well as the combat zone) for sustainment operations in conformance with the theater of war commander's guidance. This is an operational C2 function covered by OP.4.3.6 Finalize Commanders' Concept and Intent.

OP.6.6.2 Provide Sustainment Engineering. To dismantle fortifications and to construct and maintain facilities and communications networks that give physical structure to the lines of communication thus setting the capacity of CSS organizations to provide materiel and services to operational commanders. This function includes the following: Building/maintaining forward staging bases; rear area restoration, LOC sustainment; construction support; and acquisition or production of construction materiel.

OP.6.6.3 Provide Law Enforcement and Prisoner Control. To provide, in the COMMZ and in support of operational commander's campaigns and major operations, enemy prisoner of war collection, processing, evacuation and internment; and to enforce military law and order. Battlefield circulation control is analyzed under the transportation function, 6.5.1 Provide Movement Services.

OP.6.7 Conduct Civil Affairs in Theater (or Area) of Operations. To conduct those phases of the activities of an operational commander which embrace the relationship between the military forces and civil authorities and people in a friendly country or area or occupied country or area (theater or area of operations) when military forces are present.

Operational Blueprint

OP.6.8 Evacuate Noncombatants from Theater (or Area) of Operations. To use theater of operations military and host nation resources for the evacuation of US forces dependents, US government civilian employees and private citizens (US and 3d nation). Organizations at various echelon provide support (e.g., medical, transportation, security, etc.) to the noncombatants; the support provided is analyzed under the appropriate function.

Note: The preferred way of providing support structure is through a combination of host nation, third country, contractor, and US Civilian resources. Obtaining sustainment from other sources is a function related to operational sustainment. It refers to obtaining sustainment support from sources other than US Army CSS organizations and includes obtaining the following: host nation support, logistics civil augmentation, DA civilian support, and captured materiel. This function is analyzed under the operational C2 function, OP.4.4.1.2 Coordinate Service Component, Theater Army and Other Support.

Appendix C

Blueprint for the Tactical Level of War

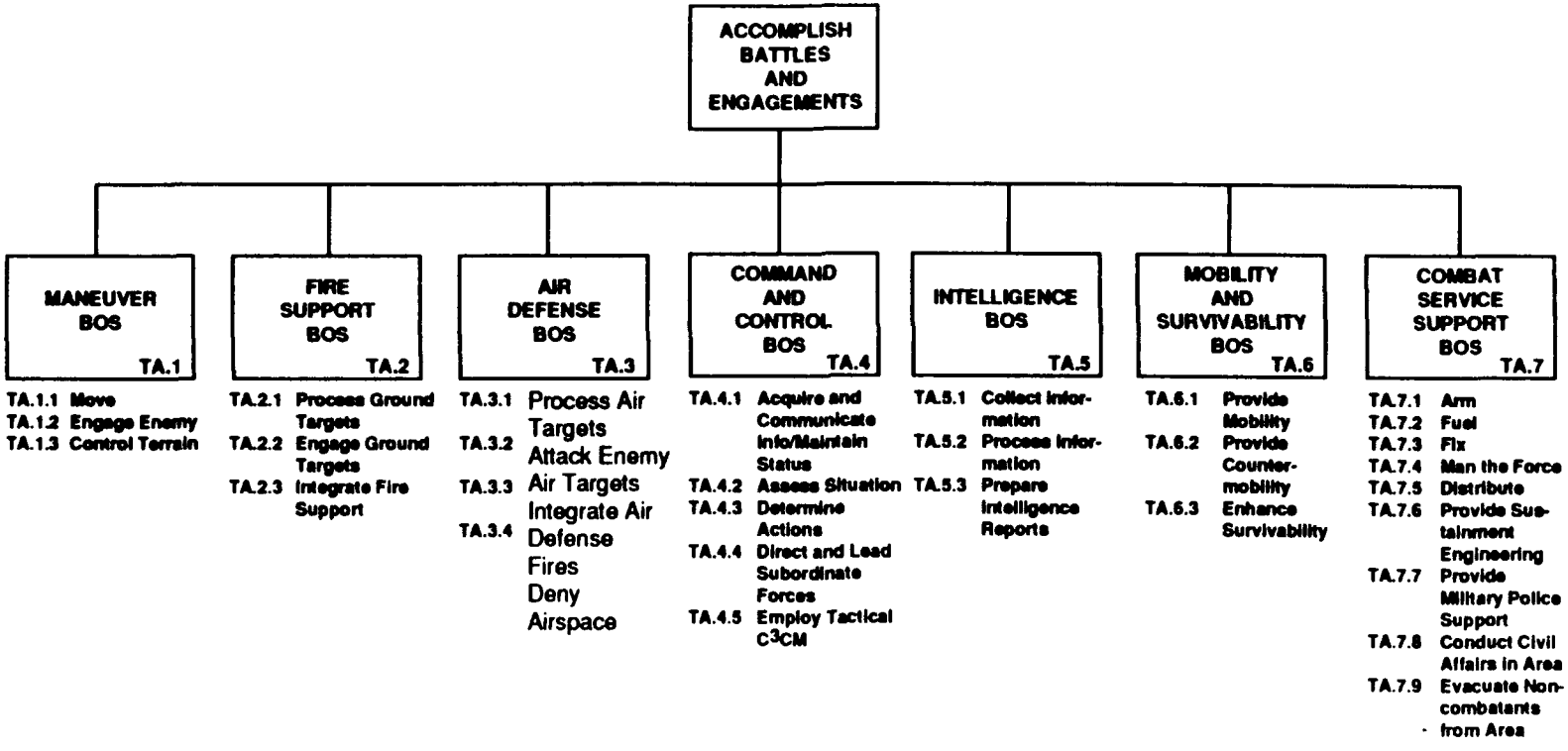
This appendix lists and defines the seven Battlefield Operating Systems (BOS) and associated subfunctions. Individual index numbers are assigned to each BOS and associated subfunctions. Listed also are the generic tactical tasks subordinate to each of the lowest level subfunctions of the Tactical Blueprint.

TA designates a Tactical Level Blueprint function or subfunction. Generic tactical tasks are designated by "GT". To improve readability of the Tactical Blueprint, the index number associated with a generic tactical task has been omitted. However, this index number must be included when citing the task:

Example. The index number for the subfunction Navigate in the Maneuver BOS is TA.1.1.3 and the complete reference is TA.1.1.3 Navigate. Under TA.1.1.3 Navigate the first generic tactical task is listed as GT1 Determine Distance. Any reference to this generic tactical task should read "TA.1.1.3.GT1 Determine Distance."

The figure on the next page summarizes the BOS and their major subfunctions for the user's ready reference.

Blueprint for the Tactical Level of War - Summary



Appendix C

Blueprint for the Tactical Level of War

Section I. Maneuver BOS

TA.1 Maneuver BOS. The employment of forces on the battlefield through movement and direct fires in combination with fire support, or fire potential, to achieve a position of advantage, in respect to enemy ground forces, in order to accomplish the mission. This includes direct fire systems (e.g., small arms, tank guns, and attack helicopter fires).

TA.1.1 Move. To position or reposition forces (units and equipment) relative to the enemy to secure or retain positional advantage making full use of terrain and formation. It is the dynamic element of combat--the means of concentrating forces at the critical point to achieve the surprise, psychological shock, physical momentum, and moral dominance which enable smaller forces to defeat larger ones. Units supporting combat maneuver units are included since they are expected to go wherever the combat units go. Note: Movement of cargo, equipment, and personnel is covered under function TA.7.5.1.2, Move/Evacuate Cargo, Equipment, and Personnel.

TA.1.1.1 Position/Reposition Forces (Units and Equipment). To change physically the location of military organizations or units and their equipment from one point or area to another using the terrain, formation, and techniques to gain an advantage over an enemy. Movement may be on or under the surface, or through the air. Position forces includes bypassing obstacles. Also, it includes movement of units by a nonorganic organization; e.g., infantry unit by a truck unit.

TA.1.1.1.1 Prepare for Movement. To assemble and inspect personnel, equipment, and supplies in preparation for a tactical movement.

GT1 Conduct personnel and equipment inspections
GT2 Load combat supplies, munitions and equipment
GT3 Load personnel

TA.1.1.1.2 Move on or under Surface. To move on the ground, or on or under water. This movement may be mounted or dismounted.

TA.1.1.1.2.1 Move while Mounted. To move forces on, in, or astride a vehicle. The vehicle could be tracked or armored, wheeled, air cushion, waterborne, or other.

GT1 Initiate mounted movement
GT2 Use mounted formations and movement techniques
GT3 Respond to vehicle emergencies
GT4 Transfer between mounted modes of transportation

TA.1.1.1.2.2 Move while Dismounted. To move forces without vehicular assistance; e.g., foot, SCUBA.

GT1 Initiate dismounted movement
GT2 Use dismounted formations and movement techniques
GT3 Transfer between mounted and dismounted modes of transportation
GT4 Carry weapons and individual equipment

TA.1.1.1.3 Move through Air. To move forces by fixed or rotary winged aircraft, parachute, etc.

GT1 Initiate air movement
GT2 Use air formations and movement techniques
GT3 Compensate for in-flight equipment emergencies
GT4 Prepare for unloading

TA.1.1.1.4 Close into Tactical Position. To complete movement or deployment into a tactical position.

GT1 Disembark from conveyance
GT2 Deploy into fighting/halt position
GT3 Deploy into assembly/staging area
GT4 Deploy into support area

TA.1.1.2 Negotiate Terrain. To overcome the challenges presented by the trafficability or configuration of the terrain through the inherent characteristics of personnel or their equipment.

GT1 Traverse unimproved terrain
GT2 Ford or swim water features
GT3 Cross gaps in stride
GT4 Self-breach obstacles
GT5 Perform self-recovery

TA.1.1.3 Navigate. To plan, record, and control the course of an individual, unit, or vehicle on land, air, or water while mounted or dismounted. Navigate includes the use of navigational aids (e.g., map, compass, charts, stars) or dead reckoning.

GT1 Determine distance
GT2 Determine direction
GT3 Determine location
GT4 Determine elevation/altitude
GT5 Determine/select route

GT6 Provide data for navigational aids
GT7 Maintain orientation
GT8 Determine rate of movement

TA.1.2 Engage Enemy. To enter into conflict or combat on the ground with the enemy using direct fire or close combat. Note: Air targets are covered in the Air Defense BOS.

TA.1.2.1 Employ Direct Fire. To take the enemy under fire using gunfire delivered on a target, using the target itself as a point of aim for either the gun or the director. Examples include small arms, tanks, antitank guns and rockets, automatic weapons, directed energy weapons. Attack helicopter fires are included here.

TA.1.2.1.1 Process Direct Fire Targets. To select direct fire targets and match the appropriate response to them taking account of operational requirements and capabilities. In the case of a soldier using a small arm, processing targets might be relatively instantaneous; however, as a part of a unit it might be quite deliberate.

TA.1.2.1.1.1 Select Direct Fire Targets. To determine targets to be attacked.

GT1 Designate target areas and fields of fire
GT2 Prepare range cards/sector sketches
GT3 Choose direct fire target for engagement

TA.1.2.1.1.2 Select Direct Fire System. To determine direct fire weapon to engage a specific target.

GT1 Determine system capability
GT2 Determine system availability
GT3 Choose direct fire weapon for engagement

TA.1.2.1.2 Engage Direct Fire Targets. To engage enemy equipment and materiel, personnel, fortifications and facilities with direct fire.

GT1 Assemble/emplace direct fire weapon
GT2 Conduct direct fire weapon system inspections
GT3 Update fire control system
GT4 Prepare direct fire ammunition
GT5 Load direct fire weapon
GT6 Aim direct fire weapon
GT7 Fire direct fire weapon

TA.1.2.2 Conduct Close Combat. To fight in close quarters with the enemy utilizing bayonet and other hand weapons (except small arms direct fire weapons which are included under function 1.2.1 Employ Direct Fire).

GT1 Employ hand-delivered weapons
GT2 Employ hand-to-hand combat techniques

TA.1.2.3 Integrate Direct Fire with Maneuver. To combine all tactical direct fires with the maneuver of forces into a cohesive action maximizing their effect in accomplishing the mission.

Note: For synchronization of all fires (e.g., direct, fire support, air defense), mobility/countermobility means, and other combined arms activities in the various operating systems, see TA.4.4.5 Synchronize Tactical Operations.

TA.1.3 Control Terrain. To dominate an area to prevent enemy occupation of the position through fire, fire potential, or occupation of the terrain.

TA.1.3.1 Control Terrain through Fire or Fire Potential. To use direct fires, or to request and adjust indirect fires, or the threat of such fires on a geographic area to intimidate the enemy from occupying the ground or to make occupation of the area too costly.

TA.1.3.2 Occupy Terrain. To physically position forces on the ground thus dominating it and preventing the enemy from doing so.

GT1 Occupy fighting positions
GT2 Occupy support positions

Section II. Fire Support BOS

TA.2 Fire Support BOS. The collective and coordinated use of target acquisition data, indirect fire weapons, armed aircraft (less attack helicopters) and other lethal and nonlethal means against ground targets in support of maneuver force operations. It includes artillery, mortar and other non- line-of-sight fires, naval gun fire, close air support, and electronic countermeasures.

TA.2.1 Process Ground Targets. To select targets and match the appropriate response to them, taking account of operational requirements and capabilities.

TA.2.1.1 Select Target to Attack. To analyze each target to determine if and when it should be attacked in accordance with tactical benefit and the maneuver commander's guidance.

GT1 Determine target selection standards
GT2 Compare sensor data to target selection standards
GT3 Perform target duplication check
GT4 Determine moving target intercept point
GT5 Create target build-up report
GT6 Create target nomination list
GT7 Perform target file maintenance
GT8 Choose targets

TA.2.1.2 Select Fire Support Attack System. To determine the appropriate attack system for a particular target.

TA.2.1.2.1 Determine System Capability. To determine the attack system which can provide the required effects.

GT1 Determine fire support systems and ammunition capable of defeating target
GT2 Determine rank order of fire support systems capable of defeating target
GT3 Determine fire unit capability

TA.2.1.2.2 Determine System Availability. To determine the attack system available for executing a fire support operation.

GT1 Determine physical environment restrictions
GT2 Determine time restrictions
GT3 Determine restricted fire support systems

TA.2.1.2.3 Select System. To designate an attack system to perform a required operation.

TA.2.1.3 Develop Order to Fire. To create firing instructions (e.g., selected target, required effects, time on target) for transmission to the selected attack system.

GT1 Conduct tactical fire control
GT2 Conduct technical fire direction
GT3 Issue fire commands
GT4 Issue message to observer/requestor

TA.2.2 Engage Ground Targets. To enter into conflict with the enemy using fire support systems.

TA.2.2.1 Conduct Lethal Engagement. To use weapon systems designed to cause casualties to troops, or to destroy materiel or facilities.

TA.2.2.1.1 Conduct Surface Attack. To apply ground-based weapon systems to destroy, suppress, or neutralize enemy equipment (including aircraft on the ground), materiel, personnel, fortifications, and facilities.

GT1 Locate firing position
GT2 Assemble/emplace weapon system
GT3 Orient weapon
GT4 Realign weapon sighting system
GT5 Conduct weapon system inspections
GT6 Receive firing data
GT7 Prepare ammunition
GT8 Set firing data
GT9 Load/enable weapon
GT10 Fire weapon

TA.2.2.1.2 Adjust/Illuminate Fire Support Targets. To request and adjust fire support, and/or illuminate (designate) fire support targets.

GT1 Issue warning order
GT2 Provide target location
GT3 Provide target description
GT4 Specify method of engagement
GT5 Specify method of fire and control
GT6 Designate targets
GT7 Sense the strike of rounds
GT8 Determine adjustment to strike of round

TA.2.2.1.3 Request Air-to-Ground Attack. To request the employment of Navy, Marine, and Air Force aircraft to deliver rocket, cannon and missile fires, and bombs on enemy ground positions.

Generic Tasks: See TA.2.2.1.2 Adjust/Illuminate Fire Support Targets and TA.4.4.1.2 Coordinate Support

TA.2.2.2 Conduct Nonlethal Engagement. To employ means designed to impair the performance of enemy personnel and equipment.

TA.2.2.2.1 Reduce Enemy Personnel Effectiveness. To degrade enemy soldier performance through direct action or indirect influences.

TA.2.2.2.1.1 Employ Incapacitating Agents. To use chemicals that produce temporary disabling conditions that (unlike those caused by riot control agents) can be physical or mental and persist for hours or days after exposure to the agent has ceased.

GT1 Select incapacitating agents for desired effect
GT2 Select delivery means

TA.2.2.2.1.2 Conduct Battlefield Psychological Activities. To use planned psychological activities conducted as an integral part of combat operations and designed to bring psychological pressure to bear on enemy forces and civilians under enemy control in the battle area, to assist in the achievement of the tactical objectives.

GT1 Conduct target audience analysis
GT2 Select themes and symbols
GT3 Select media
GT4 Develop propaganda products
GT5 Conduct pretest
GT6 Obtain final campaign approval
GT7 Disseminate propaganda products

TA.2.2.2.2 Reduce Enemy Equipment Effectiveness. To degrade enemy equipment performance or render the equipment ineffective for its intended purpose.

TA.2.2.2.2.1 Conduct Jamming. To use deliberate radiation, reradiation, or reflection of electromagnetic energy with the object of degrading the effectiveness of electronic devices, equipment, or systems used by a hostile force.

GT1 Determine signal to be jammed
GT2 Determine desired result
GT3 Select jamming method
GT4 Initiate jamming
GT5 Determine jamming effects on target
GT6 Adjust jamming

TA.2.2.2.2.2 Counter Target Acquisition Systems. To suppress (e.g., using hasty smoke, dazzling illumination) or degrade enemy direct observation, day and night vision optics,

radar, sensors, electronic direction-finding equipment, and imaging systems used to detect, locate, classify, and identify friendly targets.

GT1 Employ obscurants
GT2 Use electronic/electromagnetic countermeasures
GT3 Use electro-optical countermeasures

TA.2.2.2.2.3 Employ Disabling Agents. To employ chemical agents or other means to degrade enemy equipment.

GT1 Select disabling agents for desired effect
GT2 Select delivery means

TA.2.3 Integrate Fire Support. To combine and coordinate all fire support means for the tactical commander in battles and engagements in support of the commander's concept of operations and intent.

Section III. Air Defense BOS

TA.3. Air Defense BOS. All measures designed to nullify or reduce the effectiveness of attack by hostile aircraft or missiles after they are airborne.

TA.3.1 Process Air Targets. To select targets and match the appropriate response to them, taking account of operational requirements and capabilities.

TA.3.1.1 Select Air Targets to Attack. To analyze each target to determine if and when it should be attacked in accordance with tactical benefit and the maneuver commander's guidance.

- GT1 Receive early warning/target information
- GT2 Compare air target data to target selection standards
- GT3 Determine priorities of engagement
- GT4 Choose air targets

TA.3.1.2 Select System for Air Targets. To determine the appropriate air defense system for a particular target.

TA.3.1.2.1 Determine System Capability for Engaging Air Targets. To determine the attack system which can provide the required effects.

- GT1 Consider weapons engagement zones
- GT2 Consider weapon system characteristics

TA.3.1.2.2 Determine System Availability for Air Engagement. To determine the attack systems available for executing an air defense operation.

- GT1 Consider operational availability and missile status
- GT2 Consider weapons control status
- GT3 Determine time restrictions

TA.3.1.2.3 Select System for Air Engagement. To designate an attack system to perform a required operation.

TA.3.1.3 Develop Order to Fire at Air Targets. To create firing instructions for transmission to the selected attack system.

- GT1 Review airspace control guidance/restrictions
- GT2 Issue fire control orders

TA.3.2 Attack Enemy Air Targets. To intercept, engage, destroy or neutralize enemy aircraft and missiles in flight.

TA.3.2.1 Conduct Lethal Engagement of Air Targets. To apply firepower to destroy enemy air targets.

TA.3.2.1.1 Employ Air-to-Air Weapons. To use weapon systems carried on aircraft to attack enemy air targets.

Generic Tasks: See TA.1.1.1.3 Move Through Air and TA.1.2 Engage Enemy

TA.3.2.1.2 Employ Surface-to-Air Weapons. To use weapon systems positioned on the surface to attack enemy air targets.

TA.3.2.1.2.1 Employ Air Defense Artillery. To use dedicated air defense systems to destroy enemy air targets.

GT1 Emplace weapon system
GT2 Establish sector of fire/primary target line
GT3 Prepare weapon for engagement
GT4 Load/enable weapon
GT5 Engage air targets
GT6 Perform weapon system inspections

TA.3.2.1.2.2 Employ Other Unit Fires. To use weapon systems other than dedicated air defense systems (e.g., small arms and crew-served weapons systems, TOW missiles) to destroy enemy air targets.

GT1 Engage air targets with small arms, crew-served weapons, and cannons
GT2 Engage air targets with other surface means

TA.3.2.2 Conduct Nonlethal Engagement of Air Targets. To employ means designed to impair the performance of enemy aircraft, to include jamming of navigational aids and weapon system guidance systems.

GT1 Incapacitate aircrews
GT2 Disable airborne equipment
GT3 Conduct jamming of noncommunications equipment

TA.3.3 Integrate Air Defense Fires. To combine and coordinate all tactical air defense means for the tactical commander in battles and engagements in support of his concept of operations and intent.

TA.3.4 Deny Airspace. To prevent enemy use of airspace through fire potential or other means without direct attack of air targets (e.g., deliberate smoke, barrage balloons).

GT1 Reduce navigability
GT2 Reduce airborne weapon effectiveness

Section IV. Command and Control BOS

TA.4 Command and Control BOS. The exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of the mission. C2 functions are performed through an arrangement of personnel, equipment, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.

Note: C2 is conducted in all functional areas and at all echelons, because it is the decision making and direction performed by military leaders. For analytical purposes the C2 functions are written generically and consolidated under the C2 BOS. For example, planning for transportation movements control and highway regulation is specialized planning for transportation operations; this specialized planning is analyzed under the function, TA.4.3 Determine Actions. The actual control and supervision of transportation movements is also a C2 function; it is executed through the feedback of information and its assessment and accomplished through the next iteration of the C2 cycle.

TA.4.1 Acquire and Communicate Information and Maintain Status. To gain possession of information on the mission, enemy forces, friendly troops, terrain and weather (METT), by or for the commander or his staff, to translate that information into usable form and to retain and disseminate it. The distinction between this function (TA.4.1) and the intelligence function, TA.5.1 (Collect Information) is that TA.4.1 refers to the physical aspect of exchanging METT data or information with the C2 echelons under consideration whereas TA.5.1 refers to the process of collecting or generating enemy and terrain information from the battlefield environment.

TA.4.1.1 Communicate Information. To send and receive data (e.g., verbal, electronic, written) from one person or place to another. This function includes the distribution of data and information by any means.

TA.4.1.1.1 Receive and Transmit Mission. To receive or send the mission that includes plans and orders, or other directives.

TA.4.1.1.2 Receive and Transmit Enemy Information. To receive or send combat information or processed intelligence information of every description on the enemy, to include social, political, and economic aspects.

TA.4.1.1.3 Receive and Transmit Terrain and Weather Information. To receive or send material of every description on the physical environment.

TA.4.1.1.4 Receive and Transmit Friendly Troop Information. To receive or send data on friendly forces.

GT1 Exchange friendly force periodic and as-required reports
GT2 Exchange friendly force spot reports

TA.4.1.2 Manage Means of Communicating Information. To direct, establish, or control the instruments used in sending or receiving information, and to use communication networks of various means (e.g., radio, wire and cable, visual and sound communications and messenger) and modes (e.g., FM, multichannel, RATT, CW, tactical satellite, data, facsimile) for obtaining or sending information. These nets include Area Common User, Combat Net Radio, and Data.

GT1 Establish communications networks and facilities
GT2 Establish system control facilities, network management, and spectrum management
GT3 Establish and operate messenger service
GT4 Employ communications procedures
GT5 Employ technical control procedures
GT6 Employ audio and visual signals

TA.4.1.3 Maintain Information and Force Status. To screen, circulate, store, and display data in a form that enables the decision maker to assimilate what he requires.

TA.4.1.3.1 Store Information. To retain data in any form, usually for the purpose of orderly retrieval and documentation.

GT1 Maintain operations records and reports
GT2 Maintain administrative records and procedures
GT3 Maintain data bases

TA.4.1.3.2 Display Information. To represent data by audio and visual means to support decision making.

GT1 Organize and summarize information for display
GT2 Display operational information
GT3 Maintain/update displayed information

TA.4.1.3.3 Publish and Reproduce Information. To copy and/or prepare and issue data for distribution.

GT1 Perform editorial services and conduct technical composition of original material
GT2 Produce printed material
GT3 Produce audiovisual material

TA.4.1.3.4 Manage Information Distribution. To decide on the routing of relevant data to the appropriate user or custodian.

GT1 Determine information routes
GT2 Select distribution means

TA.4.2 Assess Situation. To continuously evaluate information received through reports or the personal observations of the leader or commander to decide whether different actions are required from those that would result from the most recent orders issued.

TA.4.2.1 Review Current Situation. To examine on-hand information.

TA.4.2.1.1 Analyze Mission. To analyze the mission to determine the specific tasks (stated and implied) to be performed, their complexity, and their relative importance.

GT1 Determine intent and concept of higher commander
GT2 Identify stated and implied tasks
GT3 Determine what action is required, when, where, and why
GT4 Determine constraints on actions

TA.4.2.1.2 Fuse Information. To combine incoming data with other previously held data.

GT1 Determine nature and sources of relevant information
GT2 Determine form and content of integrated information product
GT3 Produce integrated information product

TA.4.2.1.3 Evaluate Incoming Information. To examine and separate critical from common information.

GT1 Determine relevance of new information to situation
GT2 Determine reliability and credibility of new information

TA.4.2.2 Project Future Requirements. To analyze and evaluate facts and trends to determine probable future missions and tasks.

GT1 Examine facts and assumptions
GT2 Determine and evaluate trends
GT3 Determine probable requirements and set priorities

TA.4.2.3 Decide on Need for Action or Change. To decide whether actions are required which are different from those which

the unit or organization has already been directed to execute; to determine when to make decisions.

TA.4.3 Determine Actions. To conduct the continuous process of making estimates and decisions for assigned or projected tasks. This function involves a detailed and systematic examination of all aspects of contemplated operations including deciding to alter planned or on-going actions. This function also includes the formulation of the commander's concept and intent. Inherent to this function, TA.4.3 Determine Actions, is the planning for the conduct of all functions found in each BOS to include countermeasures (e.g., C3CM, counterfire, countermobility).

Note: The function TA.4.3 includes planning for C3CM and the determination of (a) C3 defensive measures for friendly critical C3I facilities and capabilities, and (b) C3 offensive measures directed against enemy critical C3I facilities and capabilities. C3CM actions include OPSEC, deception, jamming, and fires (destruction); the conduct of the functions associated with these measures is analyzed under the BOS appropriate to each C3 countermeasure.

TA.4.3.1 Issue Planning Guidance. To establish guidance for specific tasks to keep all planners' activities coordinated and timely (e.g., guidance on the collection of intelligence) at levels where staffs exist to support C2.

GT1 Restate the mission and commander's intent
GT2 Estimate time lines for planning sequence
GT3 Provide courses of action specifically for consideration
GT4 Provide operational limitations or constraints
GT5 Provide other guidance
GT6 Establish priorities for planning
GT7 Initiate appropriate warning orders
GT8 Initiate estimate of situation

TA.4.3.2 Develop Courses of Action. To define feasible options for completing the mission based on analysis of mission, situation (own, enemy, and terrain), and reconnaissance. This function includes evaluating available resources for supporting different courses of action.

GT1 Conduct staff studies
GT2 Provide estimates of the situation
GT3 Determine alternative courses of action

TA.4.3.3 Analyze Courses of Action. To examine or wargame each course of action to determine its advantages and disadvantages. Each friendly course of action is wargamed against each of the enemy courses of action.

GT1 Use analyses of enemy capabilities
GT2 Wargame each course of action against each probable enemy course of action
GT3 Incorporate improvements
GT4 Define requirements for any other actions in conjunction with each course of action
GT5 Determine advantages and disadvantages of each course of action

TA.4.3.4 Compare Courses of Action. To analyze the various courses of action against each other by either comparing the advantages and disadvantages of each course of action previously analyzed, or to isolate and compare decisive significant factors that are selected based on each situation.

GT1 Summarize advantages and disadvantages of each course of action
GT2 Compare advantages and disadvantages of one course of action against the advantages and disadvantages of each of the other courses of action

TA.4.3.5 Select or Modify Course of Action. To decide on the course of action which offers the best prospect for success and to issue a clear and concise statement of the general scheme of maneuver and supporting fires for the operation. This function includes finalizing the commander's concept and intent. This function also includes modifying a course of action previously selected and is therefore a continuous process.

GT1 Choose a course of action
GT2 Restate mission
GT3 State commanders concept of operation and intent
GT4 Establish priorities

TA.4.4 Direct and Lead Subordinate Forces. To provide direction to subordinate forces such that they understand and contribute effectively and efficiently to the attainment of the commander's concept and intent. This function includes the preparation and completion of orders.

TA.4.4.1 Prepare Plans or Orders. To complete written or oral communications that convey information governing action.

TA.4.4.1.1 Develop and Complete Plans or Orders. To finalize orders or plans prior to approval and issuance. Orders or plans are to conform with the commander's decision, concept, and intent.

GT1 Prepare plans and orders in accordance with commander's guidance
GT2 Assemble and format information
GT3 Prepare plan or order for distribution

TA.4.4.1.2 Coordinate Support. To coordinate with commanders and staffs of higher, adjacent, and supporting organizations (fires, communications, logistics, etc.) including air and naval services and allied organizations while finalizing plans or orders or while conducting operations.

GT1 Coordinate Army, other services, and Allied support
GT2 Tie in physically with units on left and right
GT3 Coordinate own plans with units on flanks, forward, and rear
GT4 Coordinate combat support for own plan of operation
GT5 Coordinate combat service support for own plan of operation

TA.4.4.1.3 Approve Orders. To obtain commander's approval of orders and plans prior to issuance.

TA.4.4.2 Issue Orders. To submit orders and plans for transmission to subordinate, supporting or attached units for execution and to adjacent and higher units for coordination. The transmission of the orders and plans by any means is part of the function, TA.4.1.1 Communicate Information.

TA.4.4.3 Provide Command Presence. To position the commander so as to infuse among subordinates his will and intent. Wherever the situation calls for it, the commander is personally present in a manner which will not deprive him of the ability to respond to opportunities of changing circumstances with the whole force. This function provides the flexibility for changing the direction of the battle, wherever the commander might be, in order to take advantage of unexpected success without sacrificing momentum. Note: Because control is executed through the feedback of information and its assessment, control of any mission is accomplished through the next iteration of the C2 cycle (i.e., TA.4.1, Acquire and Communicate Information and Maintain Status, and TA.4.2, Assess Situation).

TA.4.4.4 Maintain Unit Discipline. To preserve or keep ordered behavior and obedience within a unit in order to execute the commander's concept and intent even under the severest conditions of combat normally as a conditioned response to superior training and leadership to produce moral superiority over the enemy.

TA.4.4.5 Synchronize Tactical Operations. To arrange land, air, and sea tactical forces in time, space and purpose to produce maximum relative combat power of combined arms at the decisive point. It includes the vertical integration of functions within each BOS and the horizontal integration of the functions across the BOS to maximize combat output and to achieve tactical success.

Tactical Blueprint

TA.4.5 Employ Tactical C3CM. To integrate the use of operations security, tactical deception, tactical jamming, and physical destruction, supported by intelligence, to deny information, to influence, degrade, or destroy adversary tactical command, control, and communications (C3) capabilities and to protect friendly tactical C3 against such actions. Employ Tactical C3CM includes two component functions, deny enemy effective C3 of his own tactical forces (also called counter-C3) and protect friendly C3 (also called C3-protection).

Note: Applicable to this function are a number of functions covered elsewhere in the Tactical Blueprint. For counter-C3 see functions for selecting targets and means of engagement, degrading or destroying enemy C3I, and deception. For C3-protection see the functions for employing OPSEC, using camouflage and other survivability measures, conducting ECCM, and minimizing the effect of friendly C3CM on friendly C3I. For intelligence support of C3CM, see the Tactical Intelligence operating system.

Section V. Intelligence BOS

TA.5 Intelligence BOS. That knowledge of the enemy, weather, nd geographical features required by a commander in planning and conducting combat operations. It is derived from an analysis of information on the enemy's capabilities, intentions, vulnerabilities, and the environment.

TA.5.1 Collect Information. To obtain information in any manner.

TA.5.1.1 Collect Information on Situation. To obtain information affecting the possible courses of action open to the commander. Considerations include the characteristics of the area of operations and the enemy situation.

TA.5.1.1.1 Collect Threat Information. To obtain information on the enemy's disposition of forces, composition of forces, strength, recent and present significant activities, capabilities, and weaknesses or peculiarities.

GT1 Conduct surveillance
GT2 Collect captured documents and equipment
GT3 Collect situation and spot report information
GT4 Collect information from refugees, detainees, and prisoners
GT5 Conduct counterintelligence investigations

TA.5.1.1.2 Collect Physical Environment Information. To obtain information on the weather (climate, weather forecast, and weather observations) and terrain (natural and manmade, including obstacles such as mines and NBC contamination) and the likely impacts of these conditions on both the enemy and friendly forces in the area of operations.

GT1 Collect information on presence of NBC agents/contaminants
GT2 Gather meteorological data
GT3 Gather geographical data
GT4 Determine sources of natural resources
GT5 Collect road and traffic data
GT6 Locate/detect obstacles
GT7 Gather area battle damage data
GT8 Collect endemic disease information

TA.5.1.1.3 Collect Information on Social/Political/ Economic Environment. To obtain information on the social environment (e.g., characteristics of the populations), on the political environment (e.g. the degree to which the people of a country have achieved a sense of national identity), and on the economic environment (e.g., the degree of industrialization of the economy).

Tactical Blueprint

GT1 Collect information on public administration
GT2 Collect information on political environment
GT3 Collect information on economics, commerce, and agriculture
GT4 Collect information on civilian population, culture, and social structures
GT5 Collect information on facilities and utilities suitable for host nation support functions

TA.5.1.2 Collect Target Information. To acquire information that supports the detection, identification, and location of a target in sufficient detail to permit attack by friendly weapons. The target acquisition system may be closed loop (i.e., target acquisition system is an inherent part of friendly weapons system) or open loop (i.e., target acquisition system is separate from the firing system but nevertheless is part of the overall weapon system).

TA.5.1.2.1 Search for Targets. To systematically conduct a reconnaissance or surveillance of a defined area, so that all parts of the area have passed within visibility or detection.

GT1 Designate search sectors and priorities
GT2 Scan sectors

TA.5.1.2.2 Detect Targets. To perceive an object of possible military interest but not confirm it by recognition.

GT1 Disclose object of interest
GT2 Provide potential target alert
GT3 Assess military significance

TA.5.1.2.3 Locate Targets. To determine the placement of a target on the battlefield. Target location can be expressed, for example, as a 6-digit grid coordinate.

GT1 Determine target location
GT2 Determine target disposition

TA.5.1.2.4 Identify Targets. To discriminate between recognizable objects as being friendly or enemy, or the name that belongs to the object as a member of a class.

GT1 Determine friend or foe
GT2 Discriminate hostile actions
GT3 Determine class, type, size, and name of target
GT4 Determine target technical characteristics

TA.5.1.2.5 Conduct Post-Attack Target Damage Assessment. To determine the effects of attacks on targets.

GT1 Determine extent of target damage
GT2 Determine if target is functional
GT3 Determine time and effort needed to repair target
GT4 Compare attack results with desired effect

TA.5.2 Process Information. To convert information into intelligence through collation, evaluation, analysis, integration, and interpretation.

TA.5.2.1 Evaluate Threat Information. To analyze enemy forces, their composition and organization, tactical doctrine, weapons and equipment, and supporting battlefield functional systems. Threat evaluation determines enemy capabilities and how they operate relative to doctrine and training or how they would fight if not restricted by weather and terrain.

TA.5.2.1.1 Review Holdings. To review existing information on threat capabilities. Information on these capabilities is likely to exist in terms of weapon performance and lethality, force size, disposition of forces, combat effectiveness, and other factors. Additional factors used in assessing the threat include the nation's manpower and industrial base, technology, training capabilities, supply lines, and alliances. This information is preprocessed and includes product files, OB files, IPB material (for terrain data and enemy formation templates), SOPs, intelligence estimates, and contingency plans.

GT1 Assemble existing threat information
GT2 Determine reliability and credibility of information
GT3 Identify threat information gaps
GT4 Request threat information

TA.5.2.1.2 Consider Enemy Doctrine. To assess the fundamental principles by which the enemy forces guide their actions in support of objectives.

GT1 Evaluate threat capabilities and vulnerabilities
GT2 Select information for enemy doctrinal templates

TA.5.2.2 Evaluate Physical Environment Information. To assess the battlefield environment. This includes terrain, weather, lines of communication, etc..

TA.5.2.2.1 Review Holdings. To review existing information on the physical environment. This information is preprocessed and includes product files, terrain data bases, IPB material, intelligence estimates, and contingency plans.

GT1 Assemble existing terrain information
GT2 Assemble existing climatological information

5.2.2.2 Consider Status. To determine the present status of the physical environment (weather conditions, condition of lines of communications (LOCs), etc.).

GT1 Determine additional information requirements
GT2 Develop weather forecast
GT3 Evaluate weather information
GT4 Conduct terrain analysis

TA.5.2.2.3 Develop Impacts. To assess the effects of the physical characteristics of the Area of Operations on each significant course of action which the enemy is physically capable of adopting and which, if adopted, could adversely affect the accomplishment of the mission. These physical characteristics include climatic or weather conditions, terrain and its tactical aspects (e.g., observation and fire, concealment and cover, obstacles, NBC contamination, key terrain features, avenues of approach), and lines of communications (and their impact on CSS).

GT1 Determine terrain effects on courses of action
GT2 Determine weather effects on courses of action

TA.5.2.3 Evaluate Social/Political/Economic Environment. To conduct analyses to determine opportunities for (1) obtaining local resources, facilities, and support in a theater of operations, (2) minimizing interference with military operations, and (3) supplementing the intelligence effort. Also assesses the impacts of these factors on the military operation.

GT1 Analyze the significance of social, political, and economic events and attitudes in the area of responsibility
GT2 Evaluate resources/support available in host nation or area of responsibility
GT3 Identify host nation or area of responsibility military or civil support requirements
GT4 Request social/political/economic environment information

TA.5.2.4 Integrate Intelligence Information. To combine and analyze combat information, preprocessed information, and intelligence database information in order to project significant battlefield events and enemy activities, to predict enemy intentions, and to develop targeting data.

TA.5.2.4.1 Develop Enemy Intentions. To assess the enemy's aim or design (as distinct from capability) to execute a specified course of action.

GT1 Develop alternative threat courses of action
GT2 Project probable threat organization and composition

GT3 Consider impacts of physical environment on enemy courses of action
GT4 Consider impacts of social/political/economic environment on enemy courses of action
GT5 Project the most probable threat course of action
GT6 Determine friendly tactical decision points

TA.5.2.4.2 Develop Targeting Information. To provide direct targeting data (combat information) for immediate engagement, and to develop correlated target information from all sources.

GT1 Evaluate target technical characteristics
GT2 Develop high value target (HVT) and high payoff target (HPT) lists
GT3 Develop direct targeting data
GT4 Develop correlated targeting data

TA.5.3 Prepare Intelligence Reports. To develop and produce standard reports and IPB products for the commander's use to report intelligence or information, to task intelligence assets, or to receive information, intelligence orders, or instructions.

TA.5.3.1 Prepare Reports on Target Development. To describe what the targets are, their location (i.e., grid coordinate), target location error (TLE), and a loiter or "good until" time (for time-critical targets).

GT1 Prepare periodic and as-required target reports
GT2 Prepare target spot reports

TA.5.3.2 Prepare Reports on Enemy Intentions. To assess and describe the enemy's aim or design (as distinguished from capability) to execute a specific course of action.

TA.5.3.3 Prepare Reports on the Battlefield Area. To develop reports that discuss what influence the Area of Operations has on probable enemy courses of action. It includes a general description of the area (climatic/ weather conditions, terrain, other characteristics), military characteristics of the area (observation and fire, concealment and cover, obstacles, NBC contamination, key terrain features, avenues of approach), and the effects of characteristics of the area on the enemy courses of action.

TA.5.3.4 Prepare Reports on Enemy Situation. To produce an intelligence estimate of those courses of action which the enemy is physically capable and that, if adopted, will affect

accomplishment of our mission. Enemy capabilities are considered in the light of all known factors affecting military operations, including time, space, weather, terrain, and the strength and disposition of enemy forces.

GT1 Prepare periodic and as-required enemy reports
GT2 Prepare enemy spot reports

Section VI. Mobility and Survivability BOS

TA.6. Mobility and Survivability BOS. The capability of the force that permits freedom of movement, relative to the enemy, while retaining the ability to fulfill its primary mission. It also includes those measures the force takes to remain viable and functional by protection from the effects of enemy weapon systems and natural occurrences.

TA.6.1 Provide Mobility. To provide freedom of movement for personnel and equipment on the battlefield without delays due to terrain or obstacles.

TA.6.1.1 Overcome Obstacles. To enable a force to maintain its mobility by removing or clearing/reducing existing and man-made obstacles. Existing obstacles are natural and cultural features that are already present such as rivers, mountains, and cities. Man-made obstacles, such as minefields or antitank ditches, are those added to the terrain by the enemy to strengthen the terrain and extend existing obstacles.

TA.6.1.1.1 Breach Obstacles. To clear a path or lane for personnel and equipment through an obstacle.

TA.6.1.1.1.1 Breach Minefields. To clear a path or lane through a mined area for friendly forces to continue their mission.

GT1 Neutralize mines in lanes
GT2 Mark lanes through minefield
GT3 Proof lanes through minefield
GT4 Clear minefield

TA.6.1.1.1.2 Breach All Other Obstacles. To clear a path or lane through obstacles (other than minefields) by manual, mechanical, or explosive means.

GT1 Breach obstacles mechanically
GT2 Breach obstacles with demolitions

Ta.6.1.1.2 Reduce/Clear Obstacles. To completely destroy or remove an obstacle.

GT1 Reduce/clear obstacles mechanically
GT2 Reduce/clear obstacles using demolitions
GT3 Reduce/clear obstacles using chemicals
GT4 Reduce/clear obstacles using directed energy

TA.6.1.1.3 Cross Gaps. To pass through or over any battlefield terrain feature, wet or dry, that is too wide to be overcome by self bridging.

Tactical Blueprint

GT1 Prepare/improve access and egress points
GT2 Employ assault gap crossers
GT3 Employ assault float bridging
GT4 Employ follow-on float bridging
GT5 Construct military standard fixed bridges
GT6 Construct non-standard fixed bridges
GT7 Construct rafts and other expedients

TA.6.1.2 Enhance Movement. To provide adequate force mobility in the forward area.

6.1.2.1 Construct/Repair Combat Roads and Trails. To prepare or repair routes of travel for equipment or personnel.

GT1 Delineate routes and sites
GT2 Clear ground cover
GT3 Perform earthwork
GT4 Provide drainage
GT5 Stabilize soil
GT6 Prepare surface

TA.6.1.2.2 Construct/Repair Forward Airfields and Landing Zones. To prepare or repair landing zones, landing strips, or low altitude parachute extraction system sites to support aviation ground facility requirements in the forward battle area.

Generic Tasks: See TA.6.1.2.1 Construct/Repair Combat Roads and Trails

TA.6.1.2.3 Facilitate Movement on Routes. To expedite the forward movement of combat resources by the enforcement of main supply route regulation and control of stragglers and refugees. To allow the unimpeded passing of a moving force. Included are the clearing of accidents, chokepoints, and other traffic and the use of multiple routes.

Note: Route reconnaissance and surveillance is analyzed under the Intelligence BOS function TA.5.1 Collect Information. Also, the dissemination of route information is a C2 function analyzed under TA.4.1.1 Communicate Information.

GT1 Control road traffic
GT2 Control air traffic
GT3 Provide refugee control
GT4 Provide straggler control

6.2 Provide Countermobility. To delay, channel, or stop offensive movement by the enemy in order to destroy his forces directly or indirectly by enhancing the effectiveness of friendly indirect and direct weapon systems.

6.2.1 Secure/Select Location of Obstacles. To identify specific locations where reinforcing obstacles can be used to strengthen the terrain and to extend existing obstacles in support of the tactical plan.

GT1 Review terrain analysis of existing obstacles
GT2 Select sites to enhance the obstacle value of terrain

6.2.2 Emplace Obstacles. To apply military effort to strengthen the existing terrain to slow, stop, or canalize the enemy. Obstacles include, for example, blowing a road crater, constructing a log crib, or emplacing mines.

6.2.2.1 Emplace Mines. To emplace conventional or scatterable mines on the battlefield.

GT1 Install minefield
GT2 Deliver area mines

TA.6.2.2.2 Prepare/Emplace Constructed Obstacles. To prepare/emplace obstacles by soldiers and machinery, generally without the use of explosives (e.g., wire, log cribs, steel "H" beam post obstacles).

GT1 Design obstacle
GT2 Select construction material
GT3 Construct obstacle
GT4 Position obstacle

TA.6.2.2.3 Emplace Demolition Obstacles. To emplace explosives before or during a battle whose detonation can be used to deny terrain to the enemy or enhance a kill zone.

GT1 Calculate explosive requirement
GT2 Select explosives
GT3 Position explosives

TA.6.2.2.4 Emplace Chemical Obstacles. To employ persistent chemical agents to restrict or channel enemy movement.

GT1 Design chemical obstacle
GT2 Select chemical obstacle agent
GT3 Select chemical obstacle delivery means
GT4 Dispense/deliver chemical obstacle agent
GT5 Replenish chemical obstacle

TA.6.2.3 Mark Obstacles. To fence or guard protective (e.g., deliberate) and tactical minefields or contaminated areas in order to protect friendly troops and noncombatants.

Tactical Blueprint

GT1 Identify area for marking
GT2 Prepare and emplace markers
GT3 Prepare obstacle location report

TA.6.2.4 Detonate Mines/Explosives. To cause the explosion and the resulting destruction of enemy personnel and vehicles, obstacles, facilities, or terrain.

GT1 Fuze mines/explosives
GT2 Arm mines/explosives
GT3 Explode mines/explosives on command

TA.6.3 Enhance Survivability. To protect personnel, equipment, and supplies from enemy systems and natural occurrences while simultaneously deceiving the enemy.

TA.6.3.1 Provide Battlefield Hazard Protection. To provide protection of friendly forces on the battlefield by reducing or avoiding the effects of enemy weapons.

TA.6.3.1.1 Protect Individuals and Systems. To use protective fighting positions (natural or artificial), protective equipment (e.g., armor, MOPP gear, collective protective equipment such as ballistic shelters), electronic systems protection, or other measures to reduce the effects of enemy weapon systems.

TA.6.3.1.1.1 Employ Electronic Counter-Countermeasures (ECCM). To take action to ensure friendly effective use of the electromagnetic spectrum despite the enemy's use of electronic warfare.

GT1 Discriminate interference from jamming
GT2 Take antijamming actions
GT3 Change mode of operations

TA.6.3.1.1.2 Prepare Fighting Positions. To take action to prepare positions for troops and systems engaging the enemy that provide necessary protection for personnel, yet allow fields of fire and maneuver.

GT1 Construct weapon firing platform/position
GT2 Construct parapets
GT3 Excavate defilade positions/trenches
GT4 Clear concealed displacement routes
GT5 Prepare/augment overhead cover
GT6 Flatten or reduce spoil

TA.6.3.1.1.3 Prepare Protective Positions. To take action to provide protection for personnel and/or materiel not directly involved with fighting the enemy from attack or environmental extremes.

GT1 Construct parapets and revetments
GT2 Prepare overhead cover
GT3 Excavate deep cuts and trenches
GT4 Stabilize trench, parapet, and other walls
GT5 Build shelters

A.6.3.1.1.4 Employ Protective Equipment. To employ both individual and collective equipment to protect personnel and systems against hazards caused by extreme changes in physical environment, dangerous working conditions, or enemy action.

GT1 Use protection against ballistic effects
GT2 Use protection against contaminants
GT3 Use protection against natural environment
GT4 Use protection against electromagnetic energy

TA.6.3.1.2 Remove Battlefield Hazards. To take action to eliminate the presence of hazards to equipment and personnel.

TA.6.3.1.2.1 Decontaminate Personnel and Systems. To make any person, object, or area safe by absorbing, destroying, neutralizing, making harmless, or removing, chemical or biological agents, or by removing radioactive material clinging to or around it.

GT1 Decontaminate individual soldier and equipment
GT2 Perform systems and supplies decontamination
GT3 Perform hasty decontamination
GT4 Perform deliberate decontamination

TA.6.3.1.2.2 Provide Explosive Ordnance Disposal (EOD) Support. To render safe, recover, evacuate and dispose of items of unexploded US and foreign ordnance and to disseminate technical information on enemy explosive ordnance materiel. This includes conventional, improvised, chemical, biological, and nuclear weapons that have been fired, dropped, or placed in such a manner as to constitute a hazard to personnel, installations, materiel, or operations.

GT1 Determine location of unexploded ordnance
GT2 Evaluate/identify unexploded ordnance
GT3 Render unexploded ordnance safe
GT4 Recover unexploded ordnance
GT5 Dispose/destroy unexploded ordnance

TA 6.3.2 Employ Operations Security. To deny adversaries information about friendly capabilities and intentions by identifying, controlling, and protecting indicators associated with planning and conducting military operations.

TA.6.3.2.1 Employ Signals Security (SIGSEC). To deny the enemy access to electronic information (both communications and noncommunications) that could be used to identify friendly capabilities and intentions.

TA.6.3.2.1.1 Employ Communications Security (COMSEC). To deny the enemy information of value which might be derived from the possession and study of telecommunications.

TA.6.3.2.1.1.1 Employ Physical Security Measures. To safeguard and prevent unauthorized access to communications equipment, material, and documents.

GT1 Control access to equipment
GT2 Employ document security measures
GT3 Destroy equipment and documents

TA.6.3.2.1.1.2 Maintain Emission Security. To select and control the use of electromagnetic, acoustic, or other emitters to optimize C2 capabilities while minimizing detection by enemy sensors; to minimize mutual interference among friendly systems.

GT1 Encode/decode messages
GT2 Install and operate communications security equipment
GT3 Authenticate messages
GT4 Avoid predictable patterns of usage
GT5 Control message length and frequency of transmissions

GT.6.3.2.1.2 Maintain Electronic Security. To deny unauthorized persons information of value that might be derived from their interception and study of noncommunications electromagnetic radiations; e.g., radar.

GT1 Conceal electromagnetic signatures
GT2 Deny location and identification of emitters

TA.6.3.2.2 Employ Concealment Techniques. To provide tactical protection from observation and surveillance.

TA.6.3.2.2.1 Employ Camouflage. To use concealment and disguise to minimize the possibility of detection and/or identification of troops, materiel, equipment, and installations. It includes taking advantage of the natural environment as well as the application of natural and artificial materials.

GT1 Use natural material and terrain features
GT2 Use camouflage materials

TA.6.3.2.2.2 Employ Noise, Light, and Physical Evidence Controls. To reduce friendly indicators by controlling personnel and equipment sounds, light emissions, and physical evidence of occupying a position.

GT1 Suppress noise signatures
GT2 Suppress light signatures
GT3 Reduce/remove physical evidence of friendly force route or site occupation

TA.6.3.2.2.3 Employ Smoke/Obscurants. To use smoke or obscurants to conceal friendly positions and to screen maneuvering forces from enemy observation.

GT1 Obscure immediate area
GT2 Obscure wide area

TA.6.3.3 Conduct Deception in Support of Tactical Operations. To take actions that mask the real objectives of tactical operations and delay effective enemy reaction by misleading the enemy about friendly intentions, capabilities, objectives, and the locations of vulnerable units and facilities. It includes manipulating, distorting, or falsifying evidence available to the enemy to ensure security to REAL plans, operations, or activities.

TA.6.3.3.1 Employ Physical Deception. To use tactics (e.g., demonstrations, feints, ruses, displays, deception smoke screens) to prevent the enemy from learning the intentions of the friendly force.

GT1 Employ visual deception
GT2 Employ auditory deception
GT3 Employ olfactory deception

TA.6.3.3.2 Employ Electronic Deception. To deliberately radiate, reradiate, alter, absorb, enhance, or reflect electromagnetic energy in a manner intended to mislead hostile forces in the interpretation or use of information received by their electronic systems.

TA.6.3.3.2.1 Employ Imitative Electronic Deception. To introduce radiations into unfriendly channels that imitate hostile emissions.

GT1 Introduce false information into enemy communications networks
GT2 Introduce false radiation into enemy electronics systems

Tactical Blueprint

TA.6.3.3.2.2 Employ Simulative Electronic Deception. To create electromagnetic emissions to represent friendly notional or actual capabilities to mislead hostile forces.

GT1 Simulate emissions of a nonexisting unit
GT2 Simulate electronic equipment capabilities
GT3 Generate false unit location emissions

TA.6.3.3.2.3 Employ Manipulative Electronic Deception. To alter friendly electromagnetic emission characteristics, patterns, or procedures to eliminate revealing or convey misleading, telltale indicators that may be used by hostile forces.

GT1 Employ manipulative communications deception
GT2 Employ manipulative noncommunications deception

TA.6.3.4 Provide Counterreconnaisance, Security and Readiness. To take actions to protect a military unit, area, an activity or installation against acts designed to, or which may, impair its effectiveness and to retain the capability to perform the unit missions and functions.

GT1 Identify friendly force profiles (signatures, patterns, and indicators)
GT2 Identify friendly force vulnerabilities
GT3 Establish local security patrols and positions
GT4 Employ anti-intrusion measures
GT5 Employ early warning measures
GT6 Employ measures to prevent hostile observation

Note: The maneuver of tactical forces for deception purposes will be analyzed under TA.1 Maneuver BOS.

Section VII. Combat Service Support BOS

TA.7. Combat Service Support BOS. The support and assistance provided to sustain forces, primarily in the fields of logistics, personnel services, and health services.

TA.7.1 Arm. To provide munitions to weapon systems. This encompasses all types of ammunition to include mines and demolition munitions. Note. Applicable to this function is Distribute--to provide class V supplies and services to military units by employing transportation and supply services. This function is covered under the general function, Distribute, at TA.7.5.

TA.7.2 Fuel. To provide fuel and petroleum products (petroleum, oils, and lubricants) to weapon systems and other equipment. Note. Applicable to this function is Distribute - To provide class III supplies and services to military units by employing transportation and supply services. This function is covered under the general function, Distribute, at TA.7.5.

TA.7.3 Fix. To preserve the availability of weapon systems and equipment. It includes the provision of repair parts and end items at the right place and time, and all the actions taken before, during, and after battle to keep equipment operational.

TA.7.3.1 Distribute. To provide class IX supplies and services to military units by employing transportation and supply services. This function is covered under the general function, Distribute, at TA.7.5.

TA.7.3.2 Fix/Maintain Equipment. To retain materiel in or to restore it to a specified condition. It includes inspection, testing, servicing, classification as to serviceability, repair, rebuilding, and reclamation.

Note: These system types can apply to each of the seven subfunctions TA.7.3.2.1 to TA.7.3.2.7. See appropriate FMs and TMs for specific definitions. See note at end of Appendix D.

TA.7.3.2.x.1	Troop Support Materiel
TA.7.3.2.x.2	Communications and Electronics
TA.7.3.2.x.3	Vessels & Wheeled/Tracked Vehicles
TA.7.3.2.x.4	Aircraft
TA.7.3.2.x.5	Weapons and Guidance Systems
TA.7.3.2.x.6	Missile Support Systems
TA.7.3.2.x.7	Medical Equipment

Tactical Blueprint

TA.7.3.2.1 Perform Preventive Maintenance. To undertake the care and servicing by personnel for the purpose of maintaining equipment in satisfactory operating condition by providing for systematic inspection, detection, and correction of incipient failures either before they occur or develop into major defects.

GT1 Clean equipment
GT2 Perform preventive checks
GT3 Perform minor adjustments
GT4 Lubricate equipment
GT5 Preserve equipment

TA.7.3.2.2 Recover. To remove disabled or abandoned materiel, either enemy or friendly, from the battlefield and its movement to a recovery collecting point or to a maintenance or supply establishment.

GT1 Determine recovery method
GT2 Recover disabled equipment
GT3 Evacuate disabled equipment to collection/service point

TA.7.3.2.3 Diagnose. To detect and isolate a malfunction or a mistake.

GT1 Perform fault isolation/troubleshoot malfunctions
GT2 Assess damage
GT3 Determine level of repair required
GT4 Determine repair parts required
GT5 Determine serviceable parts/equipment

TA.7.3.2.4 Substitute. To remove serviceable parts from one item of equipment in order to install them on another item of equipment.

GT1 Perform controlled exchange of parts
GT2 Perform cannibalization

TA.7.3.2.5 Exchange. To trade an unserviceable system or component for a serviceable system or component.

Generic Tasks: See TA.7.5.2 Supply the Force

TA.7.3.2.6 Repair. To restore an item to serviceable condition through correction of a specific failure or unserviceable condition.

GT1 Test/check equipment
GT2 Adjust, align, and repair components and assemblies

GT3 Repair and modify defective end items
GT4 Replace components and assemblies
GT5 Remove/replace piece parts
GT6 Mark/paint equipment

TA.7.3.2.7 Return. To provide serviceable equipment to the original owner, a maintenance facility, or supply activity.

GT1 Provide operational readiness item to supply stream or float
GT2 Provide repaired equipment to units

TA.7.4 Man the Force. To provide all support to the individual soldier as well as provide healthy, fit soldiers to units.

TA.7.4.1 Distribute. To provide class I, II, VI, and VIII supplies (and water), services, and replacements to military units by employing transportation services. This function is covered under the general function, Distribute, at TA.7.5.

TA.7.4.2 Provide Field Services. To perform service functions of logistics by and for the Army in the field.

TA.7.4.2.1 Clothing Exchange and Bath. To provide bathing facilities and the exchange of clothing.

GT1 Obtain fresh water, cleaning materials and drainage
GT2 Prepare shelter
GT3 Operate bath unit
GT4 Operate delousing unit
GT5 Provide clothing exchange
GT6 Provide sundries, convenience items, and other soldier comfort services

TA.7.4.2.2 Graves Registration. To supervise and execute matters pertaining to the identification, removal, and burial of the dead and collection and processing of their effects.

GT1 Operate collection point
GT2 Recover deceased soldiers
GT3 Determine and report identities of deceased soldiers
GT4 Register burial sites

TA.7.4.2.3 Salvage. To save or rescue condemned, discarded or abandoned property, and of materials contained therein, for reuse, refabrication, or scrapping.

GT1 Receive materiel at collection point
GT2 Classify materiel

GT3 Determine disposition of materiel
GT4 Dispose of materiel

TA.7.4.2.4 Laundry and Renovation. To operate laundry facilities and restore clothing or light textiles.

GT1 Collect repairable clothing and textiles
GT2 Obtain water and drainage
GT3 Repair clothing and textiles
GT4 Launder clothing
GT5 Reimpregnate clothing

TA.7.4.2.5 Bakery. To operate facilities to bake bread/bakery products.

GT1 Obtain raw ingredients
GT2 Receive bread requirements
GT3 Operate field bakery equipment
GT4 Prepare and evaluate bread products
GT5 Prepare product for shipment

TA.7.4.2.6 Feeding. To operate facilities to prepare and serve meals.

GT1 Obtain rations
GT2 Operate field kitchen equipment
GT3 Prepare rations
GT4 Serve prepared rations
GT5 Perform field kitchen sanitation

TA.7.4.3 Provide Personnel Service Support. To manage and execute all personnel-related matters to sustain combat forces, primarily in the fields of personnel administration, finance and resource management services, chaplaincy activities, public affairs, and legal services.

TA.7.4.3.1 Provide Personnel Administration Services. To carry out the functions of strength management, replacement operations, and casualty reporting and to provide personnel administration, postal, morale services, and band support to the command.

TA.7.4.3.1.1 Maintain Personnel Strength. To account for soldiers available for duty and to provide for troop replacements.

TA.7.4.3.1.1.1 Provide Strength Management. To keep track of the troops on hand, identify those that have been lost, and identify those that are needed to sustain combat.

TA.7.4.3.1.1.2 Conduct Replacement Operations. To provide timely assignment and arrange movement of individual soldiers and small units to sustain forces on the

battlefield. This includes the assignment of return-to-duty soldiers.

TA.7.4.3.1.1.3 Perform Casualty Reporting Operations. To report and provide an accounting of personnel losses on the battlefield.

TA.7.4.3.1.2 Provide Career Management Support. To maintain an effective fighting force by recognizing soldier achievements and promoting qualified personnel.

TA.7.4.3.1.2.1 Provide Officer Accessions Support. To provide support to commanders when appointing enlisted soldiers to commissioned or warrant officer status on the battlefield.

TA.7.4.3.1.2.2 Provide Promotions and Reductions Support. To fill authorized personnel spaces with qualified soldiers and maintain the discipline and quality of the force.

TA.7.4.3.1.2.3 Control Personnel Evaluation Reports. To document the performance of soldiers on the battlefield.

TA.7.4.3.1.2.4 Provide Awards and Decorations Support. To provide support to commanders in recognizing soldiers' valor and achievements.

TA.7.4.3.1.2.5 Record Personnel Information. To record information on individual soldiers to support personnel management.

TA.7.4.3.1.3 Provide Soldier Support Activities. To provide postal services and band support, and other services to promote soldier morale and welfare.

TA.7.4.3.1.3.1 Conduct Postal Operations. To receive and distribute official and personal mail to units and individual soldiers.

TA.7.4.3.1.3.2 Provide Morale, Welfare, and Recreation Activities. To provide soldiers a reprieve from the rigors of combat, and mental and physical fatigue (e.g., R&R).

TA.7.4.3.1.3.3 Provide Band Support. To provide music for troop gatherings and activities, military and religious ceremonies, and civil affairs or psychological operations events.

TA.7.4.3.2 Provide Finance Services. To provide finance services to commanders and individual soldiers, DA civilians, foreign nationals, including commercial accounts, pay, disbursing, accounting, and travel pay services, technical advice, and policy guidance and advice.

TA.7.4.3.2.1 Provide Commercial Accounts Services. To compute payment and accounting for supplies, equipment and service resulting from the procurement process (includes host nation support, and joint and combined operations support).

TA.7.4.3.2.2 Perform Pay Services. To maintain and update payroll and related records for military, civilian, and foreign national employees, to provide finance expertise on the battlefield; and to answer pay inquiries and supply financial account information.

TA.7.4.3.2.3 Perform Disbursing Services. To provide banking and currency services to commands by requesting, securing, transporting and disbursing currencies, treasury checks, military payment certificates (MPC) and foreign military scrip, in support of defense, State Department and joint and combined operations. To disburse for soldier combat payments, local combat procurements (class A agent/ordering officer activities), imprest funds, host nation support, commercial accounts, civil affairs activities, JAG claims (solatium payments), and DA civilian and local national payrolls. To serve as the DOD executive agent to the U.S. Treasury for currency funding, control (collections from WIA/KIA/EPW/CI/captured currency) and conversions for all services.

TA.7.4.3.2.4 Perform Accounting Services. To maintain financial systems and provide appropriated fund accounting and liaison services, and nonappropriated fund accounting and payroll services as required.

TA.7.4.3.2.5 Provide Travel Pay. To provide travel advances, computation of entitlements and settlement of travel accounts for both soldiers and civilians.

TA.7.4.3.3 Provide Resource Management. To provide minimum essential resource management services consisting of planning, programming, budgeting, and execution support, budget analysis, management services, and force management support.

TA.7.4.3.4 Perform Chaplaincy Activities. To provide religious support to soldiers on the battlefield, and to advise the commander on religion, morale, and morals as affected by war.

TA.7.4.3.4.1 Provide Religious Support. To provide collective worship services and denominational religious coverage in an area of operations; to conduct or arrange for

memorial ceremonies and funerals, and other sacraments, rites, and ordinanaces; and to promote individual and Army beliefs and values.

GT1 Conduct/administer sacraments, rites, and ordinances
GT2 Conduct/provide worship services
GT3 Provide ministries to promote individual beliefs and Army values

TA.7.4.3.4.2 Provide Pastoral Care and Counseling. To provide care and specialized counseling skills to soldiers for spiritual comfort, moral support, and encouragement.

TA.7.4.3.4.3 Advise on Moral and Ethical Issues. To advise on methods of improving the ethical climate within units; to serve as an ethical advocate in the prevention of dehumanizing treatment of friendly troops, enemy prisoners of war, and civilians; to advise on violation of codes of morality, illegal acts, desecration of sacred places, and disrespect for human life; and to advise on morale, moral climate, and religious welfare of units.

TA.7.4.3.5 Provide Public Affairs Services. To advise and assist the commander and the command in telling the Army story to both internal and external audiences, by originating, and assisting civilian news media in originating, both print and broadcast news material and assisting with community relations projects.

TA.7.4.3.5.1 Provide Command Information. To provide print and broadcast information to soldiers, DA civilians, and family members concerning military activities and concerns for the purpose of maintaining morale and discipline.

TA.7.4.3.5.2 Advise/Assist in Community Relations. To assist civil affairs personnel in conducting community relations projects, and to conduct such activities when civil affairs personnel are not present.

TA.7.4.3.5.3 Provide Public Information. To inform the general public of Army activities and concerns for the purpose of maintaining the public support needed to equip and sustain our forces in combat. To act as liaison between members of the command and the civilian news media. To answer news media queries and assist them in presenting accurate information concerning the Army.

TA.7.4.3.6 Provide Legal Service Support. To deliver total legal service support of the mission at every echelon of command on the AirLand battlefield by providing legal advice and

assistance on all matters concerning military, domestic, foreign, and international law, and their implementing directives and regulations.

TA.7.4.3.6.1 Interpret Administrative/Contract Law. To review facts; interpret applicable statutes, laws, and directives; and provide legal advice tailored to the command mission on administrative law and contract law matters.

TA.7.4.3.6.2 Administer Criminal Law. To provide legal advice to commanders regarding the administration of Military Justice to include advice on disposition of offenses, the preparation of charges, and conduct of courts-martial. The administration of criminal law also includes defense and judicial requirements.

TA.7.4.3.6.3 Process Claims. To investigate and adjudicate all claims against the United States arising under domestic laws and reciprocal international agreements. To assert affirmative claims on behalf of the United States.

TA.7.4.3.6.4 Provide Legal Assistance. To execute all legal assistance matters associated with preparation for overseas movement (POM). To implement the commander's preventive law program and establish a system for the delivery of legal assistance.

TA.7.4.3.6.5 Interpret International/Operational Law. To provide timely and accurate advice to commanders in an international environment. To provide legal support for operational law activities, especially law of war and civil affairs legal issues.

TA.7.4.4 Provide Health Services. To perform, provide, or arrange for services regardless of location, which promote, improve, conserve, or restore the mental or physical well-being of individuals or groups.

TA.7.4.4.1 Provide Medical Treatment. To apply medical procedures by trained professional and technical personnel, and manage patients under such procedures, for the purpose of the relief of pain and suffering, the saving of life and limb, curing disease, injury, or other disorders.

GT1 Administer first aid
GT2 Provide advanced trauma life support
GT3 Provide initial surgical care/medical treatment
GT4 Provide definitive medical treatment
GT5 Manage/treat battle fatigue
GT6 Provide dental services

TA.7.4.4.2 Evacuate Casualties. To move any person who is wounded, injured, or ill to and/or between medical treatment facilities.

GT1 Remove sick/wounded/injured soldiers from the immediate battle area
GT2 Determine destination for evacuation
GT3 Remove sick/wounded/injured to appropriate treatment facility

TA.7.4.4.3 Provide Preventive Medicine. To prevent disease and nonbattle injury and to promote health.

GT1 Apply field sanitation methods
GT2 Provide preventive medicine services
GT3 Provide stress control consultation
GT4 Perform personal hygiene
GT5 Maintain physical fitness

TA.7.4.4.4 Provide Veterinary Services. To provide veterinary public health services, veterinary medical services, and food and food processing facilities inspections.

GT1 Provide sanitary inspections
GT2 Inspect food supplies
GT3 Provide veterinary care to animals
GT4 Provide zoonotic disease control

TA.7.5 Distribute. To provide the various classes of supply and services to military units by employing transportation and supply services, or unit means.

TA.7.5.1 Provide Transport Services. To move materiel or personnel by towing, self-propulsion, or carrier via any means, such as railways, highways, waterways, pipelines, oceans, and airways.

TA.7.5.1.1 Conduct Terminal Operations. To provide in the forward combat zone for the reception, processing, and staging of passengers; the receipt, transit, storage and marshalling of cargo; the loading and unloading of ships or aircraft; and the manifesting and forwarding of cargo and passengers to a destination.

TA.7.5.1.1.1 Receive Requirements. To receive a time-phased need for the transport of units, personnel, and or materiel from a specified origin to a specified destination.

GT1 Determine type and quantity of cargo to be moved
GT2 Determine methods of transport

TA.7.5.1.1.2 Unload. To remove troops, equipment, or supplies from a means of conveyance.

Tactical Blueprint

GT1 Prepare system to receive load
GT2 Conduct cargo transfer at destination

TA.7.5.1.1.3 Load. To place troops, equipment, or supplies on ships, aircraft, trains, road transport, or other means of conveyance.

GT1 Perform load calculations
GT2 Configure system to receive load
GT3 Prepare load
GT4 Conduct cargo transfer

TA.7.5.1.1.4 Provide Terminal Services. To provide miscellaneous services at a terminal, to include temporary storage, repackaging, intraterminal movements, and management of terminal activities.

Generic Tasks: See TA.7.5.1.1.1 Receive Requirement and TA.7.5.2.5 Store Supplies

TA.7.5.1.2 Move/Evacuate Cargo, Equipment, and Personnel. To physically move supplies, equipment (i.e., resupply) and individual personnel and materiel on a transportation conveyance by a service organization or by unit means (individuals or unit organic means).

TA.7.5.1.2.1 Move by Surface. To transport by the use of waterways, railroads, roads, pipelines, or other means (e.g., individuals or organic transportation.

GT1 Conduct motor march
GT2 Conduct railway transport
GT3 Conduct waterways transport
GT4 Operate pipelines
GT5 Unit means

TA.7.5.1.2.2 Move by Air. To transport by aircraft including airdrop.

GT1 Request airlift/airdrop
GT2 Conduct aerial transport

TA.7.5.2 Supply the Force. To provide the items necessary to equip, maintain, and operate a military force.

Note: These commodity breakdowns can apply to each of the eight subfunctions TA.7.5.2.1. to TA.7.5.2.8. See appropriate FMs, TMs, and supply catalogues for specific definitions. See note at end of Appendix D.

TA.7.5.2.x.1 Classes I,II,IV,VI,VII,IX,X
TA.7.5.2.x.2 Water
TA.7.5.2.x.3 Munitions (Class V)

TA.7.5.2.x.3.1 Conventional
TA.7.5.2.x.3.2 Nuclear
TA.7.5.2.x.3.3 Chemical

TA.7.5.2.x.4 Fuel (Class III)
TA.7.5.2.x.5 Medical (Class VIII)
TA.7.5.2.x.6 Maps

TA.7.5.2.1 Request Supplies. To identify, requisition, and order supplies.

GT1 Determine requirements
GT2 Determine on-hand/due-in stocks
GT3 Prepare requisitions
GT4 Determine source/location of supply items

TA.7.5.2.2 Receive Supplies. To acquire supplies through normal supply channels or redistribution.

GT1 Determine type and quantity of shipment
GT2 Perform quality assurance inspections of supplies

TA.7.5.2.3 Produce Supplies. To make supplies.

GT1 Establish production facilities
GT2 Obtain materials and components
GT3 Modify/adapt commodity for military use
GT4 Manufacture commodity
GT5 Package commodity

TA.7.5.2.4 Procure Supplies. To obtain supplies outside normal supply channels.

GT1 Determine requirement for commercial sources
GT2 Process captured supplies

TA.7.5.2.5 Store Supplies. To warehouse or keep supplies at a location for future use.

GT1 Employ storage methods
GT2 Perform storage facilities inspections
GT3 Inspect/test supplies for serviceability
GT4 Conduct inventories

TA.7.5.2.6 Protect Supplies. To prevent damage to or loss of supplies.

GT1 Provide protective containers/packaging
GT2 Protect supplies against natural elements
GT3 Protect supplies against NBC agents
GT4 Protect supplies against ballistic effects

TA.7.5.2.7 Relocate Supplies. To move supplies within a storage area.

Generic Tasks: See TA.7.5.1.1 Conduct Terminal Operation

TA.7.5.2.8 Issue Supplies. To make supplies available to a unit.

GT1 Determine method of issue
GT2 Establish and operate a transfer/distribution point
GT3 Reissue Supplies (redistribute within a unit)

TA.7.6 Provide Sustainment Engineering. To repair and construct facilities and lines of communication.

TA.7.6.1 Perform Rear Area Restoration. To repair rear area facilities damaged by combat (e.g., clear rubble, restore electrical power).

GT1 Control flooding
GT2 Fight fires
GT3 Restore basic utilities
GT4 Clear rubble

TA.7.6.2 Perform LOC Sustainment. To maintain land, water, and air routes which connect an operating military force with one or more bases of operations and along which supplies and reinforcements move.

GT1 Construct/maintain roads and highways
GT2 Construct/maintain over-the-shore facilities
GT3 Construct/maintain ports
GT4 Construct/maintain railroad facilities
GT5 Repair/expand existing airfield facilities

TA.7.6.3 Provide Engineer Construction Support. To construct or renovate facilities (e.g., well drilling, pipeline installation).

GT1 Construct marshalling, distribution, and storage facilities
GT2 Construct pipelines
GT3 Construct/renovate fixed facilities
GT4 Drill wells for water
GT5 Dismantle fortifications

TA.7.6.4 Provide Engineer Construction Material. To acquire or produce materiel (other than class IV) needed to construct or repair facilities or lines of communication.

GT1 Produce basic construction material
GT2 Manufacture construction products

TA.7.7 Provide Military Police Support. To provide enemy prisoner of war collection, evacuation and internment; and to enforce military law and order. Battlefield circulation control is analyzed under the Mobility and Survivability BOS, subfunction TA.6.1.2 Enhance Movement.

TA.7.7.1 Perform EPW Operations. To collect, process, evacuate, intern, safeguard, and release enemy prisoners of war and civilian internees.

GT1 Collect and evacuate prisoners of war
GT2 Provide prisoner of war internment

TA.7.7.2 Conduct Law and Order Operations. To enforce laws and regulations and maintain discipline of units and personnel.

GT1 Perform law enforcement
GT2 Conduct criminal investigations
GT3 Provide military prisoner confinement

TA.7.8 Conduct Civil Affairs in Area. To conduct those phases of the activities of a tactical commander which embrace the relationship between the military forces and civil authorities and people in a friendly country or area or occupied country or area when military forces are present.

TA.7.9 Evacuate Noncombatants from Area. To use available military and host nation resources for the evacuation of US forces dependents, US government civilian employees and private citizens (US and 3d nation). Organizations at various echelon provide support (e.g., medical, transportation, security, etc.) to the noncombatants; the support is analyzed under the appropriate function.

Note: Provision has been made for referencing specific activities by system types and commodity categories associated with generic tactical tasks for two subfunctions in the CSS BOS. System types can be combined with the subfunctions and GTs only for TA.7.3.2 Fix/Maintain Equipment. Commodity categories can be combined with the subfunctions and GTs only for TA.7.5.2 Supply the Force. For example, TA.7.3.2.1.4.GT2 Perform Preventive Check on Aircraft (see page D-33), or TA.7.5.2.3.2.GT1 Establish Water Production Facilities (see page D-43).

Appendix D

Glossary

Section I. Abbreviations

AD	Air Defense
ADA	Air Defense Artillery
ADM	Atomic Demolition Munitions
AFA	architecture of the future Army
AFCENT	Allied Forces Central Europe
AG	Army Group
AOR	Area of Responsibility
BFMA	battlefield functional mission area
BOS	battlefield operating system
C2	command and control
C3CM	command, control, and communications countermeasures
C3I	command, control, communications, and intelligence
CBRS	Concept Based Requirements System
CFE	Conventional Forces Europe (negotiations)
CINC	Commander-In-Chief
CINCEUR	Commander-In-Chief, Europe
CINCLANT	Commander-In-Chief, Atlantic
CINCPAC	Commander-In-Chief, Pacific
CINCPACFLT	Commander-In-Chief, Pacific Fleet
COMMZ	Communications Zone
COMSEC	communications security
CRC	conus replacement center
CS	Combat Support
CSS	combat service support
CW	continuous wave
DA	Department of the Army
DOD	Department of Defense
ECCM	Electronic Counter-Countermeasures
ECM	Electronic Countermeasure
ESM	Electronic Support Measures
EPW	Enemy Prisoner of War
EW	Electronic Warfare
FM	field manual (Army)
GT	generic task
HNS	Host Nation Support
HPT	high payoff target
HQDA	Headquarters, Department of the Army
HS	home station
HVT	high value target
IPB	intelligence preparation of the battlefield
JAG	Judge Advocate General
JCS	Joint Chiefs of Staff
JTF	Joint Task Force
KIA	killed in action
LOC	lines of communication
METT	mission, enemy, terrain, and troops available
METT-T	mission, enemy, terrain, troops available - time
MOPP	mission-oriented protection posture

MPC	military payment certificates
MS	mobilization station
MTP	Mission Training Plan
NATO	North Atlantic Treaty Organization
NBC	nuclear, biological and chemical
NEO	noncombatant evacuation operations
OB	order of battle
OPLAN	operations plan
OPSEC	operations security
POD	Port of Debarkation
POE	Port of Embarcation
POM	preparation for overseas movement
PPBES	Planning, Programming, Budgeting, and Execution System
PPBS	Planning, Programming, and Budgeting System
RATT	radio teletype
RC	Reserve Component
SACEUR	Supreme Allied Commander, Europe
SCUBA	self-contained underwater breathing apparatus
SIGSEC	Signals security
SOF	Special Operations Forces
SOP	standard operating procedure
TA	Theater Army
TBP	to be published
TLE	target location error
TM	Technical Manual
TOW	tube-launched, optically tracked, wire guided
TRADOC	Training and Doctrine Command
UAV	Unmanned Aerial Vehicle
U.S.	United States
USTRANSCOM	US Transportation Command
WIA	wounded in action
WW	world war

Section II. Terms

Active Air Defense. Direct defensive action taken to destroy attacking enemy aircraft or missiles or to nullify or reduce the effectiveness of such attack.

Battlefield Functional Mission Area. One of the seven areas for which integrating centers are responsible to identify warfighting needs and prioritize solution sets. They are administrative groupings of capability packages and used to facilitate integration. The BFMAs represent battlefield functions, not means or environments.

Battlefield Operating Systems (BOS). The major functions occurring on the battlefield, performed by the force to successfully execute operations (battles and engagements) by the Army at the tactical level of war to accomplish military objectives directed by the operational commander.

Blueprint for the Operational Level of War. A hierarchical structure of functions that occur in the theater or area of operations. It provides a common reference for the description and analysis of joint and combined force's activities while engaged in campaigns and major operations. Shorthand term: Operational Blueprint.

Blueprint for the Strategic Level of War. A hierarchical structure of functions that occur at the national military and theater strategic level of war. It provides a common reference for the description and analysis of unified, joint, Service, and Combined forces' activities in pursuit of national strategic, national military, and theater military objectives. Shorthand term: Strategic Blueprint.

Blueprint for the Tactical Level of War. A hierarchical structure of functions and generic tasks that occur on the battlefield. It provides a standard reference for the description and analysis of a force's activities while engaged in conflict. Shorthand term: Tactical Blueprint.

Branches. Options for changing dispositions, orientation, or direction of movement and accepting or declining battle; preserves the commander's freedom of action.

Campaign. A series of related military operations aimed to achieve a strategic or operational objective within a given time or space.

Capability issue. Refers to the capability of the force to perform a function or task on the battlefield; if the function could be performed better, it would significantly improve the ability of the U.S. Army to execute its assigned missions. A capability issue can arise from either the need to correct a weakness or the opportunity to exploit an enemy weakness.

Center of Gravity. Those sources of strength or balance vital to the smooth and reliable operation of the whole force, the loss of which unbalance the entire structure, producing a cascading deterioration in cohesion and effectiveness.

Combined Arms. More than one tactical branch of the Army used together in operations.

Combined. Between two or more forces or agencies of two or more allies.

Conditions. Those factors of the physical and operational environment that may affect the ability of soldiers, systems, and/or units to perform their required duties on the battlefield. These factors include some of the variables that comprise METT-T.

Counterair Operations. Air operations conducted to attain and maintain a desired degree of air superiority by the destruction or neutralization of enemy forces.

Defensive Counterair Operations (Air Defense). The protection of assets from air attack through direct defense and destruction of the enemy's air attack capacity in the air.

Doctrine. Fundamental principles by which military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application. Doctrine includes tactics, techniques, and procedures.

Echelon. Separate level of command. As compared to a brigade, a division is a higher echelon; a battalion is a lower echelon.

Function. Activities or processes that occur over time without implying how they will be accomplished or what instruments or methods will be used to perform them.

Generic task. A discrete event or action, not specific to a single weapon system or unit, that enables a function to be accomplished.

High Payoff Target. High value targets which, if successfully attacked, would contribute substantially to the success of our plans. A target whose loss to the enemy can be expected to contribute to substantial degradation of an important battlefield function.

Joint Task Force (JTF). A force composed of assigned or attached elements of the Army, Navy or the Marine Corps, and the Air Force, or two or more of these Services, which is constituted and so designated by the Secretary of Defense or by the commander of a unified command, a specified command, or an existing joint task force.

Joint. Connotes activities, operations, organizations, etc., in which elements of more than one service of the same nation participate.

Lines of Support. Lines of communication linking the theater base or bases to the forward tactical formations.

Lines of Communication (LOC). All the routes (land, water, and air) that connect an operating military force with one or more bases of operations and along which supplies and military forces move.

Lines of Operation. Define the directional orientation of a force in relation to the enemy; connect the force with its base or bases of operation on the one hand and its operational objective on the other.

Major Operation. Comprises the coordinated actions of large forces in a single phase of a campaign or in a critical battle; major operations decide the course of campaigns.

Mission. A statement of purpose that clearly indicates the military actions to be taken and the reason therefore.

Offensive Counterair Operations. An operation mounted to destroy, disrupt or limit enemy air power as close to its source as possible.

Operating Systems. The major functions occurring on or in support of the battlefield performed by unified, joint, Service and combined forces for successfully executing national security, national military, theater, operational aor tactical objectives.

Operation. A military action or the carrying out of a strategic, tactical, service, training, or administrative military mission; the process of carrying on combat, including movement, supply, attack, defense and maneuvers needed to gain the objectives of any battle or campaign.

Operational Command/Operational Control (OPCOM/OPCON). Operational command (OPCOM) and operational control (OPCON) in joint force terminology both refer to the authority exercised by joint commanders over subordinate service components. These terms are not interchangeable in joint operations. OPCOM uniquely applies to the authority exercised by commanders of unified and specified commands and subordinate unified commands. OPCON is the authority that subordinate joint task force commanders exercise in the conduct of specific operations. The authority that military departments exercise over their respective components is commonly referred to as command less operational command.

Operational Level of War. The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives.

Operational Level of War Operating Systems. The major functions occurring in the theater (or area) of operation, performed by joint and combined operational forces, for successfully executing subordinate campaigns and major operations to accomplish the strategic objectives of the unified commander or higher military authority and operational objectives.

Passive Air Defense. All measures, other than active air defense, taken to minimize the effects of hostile air action.

Required battlefield capabilities. The ability to perform battlefield functions needed to execute warfighting doctrine and approved operational concepts. (Note: Required battlefield capabilities are also referred to as requirements or required capabilities.)

Scenario. A graphic and narrative description of the area, environment, forces, and events of a hypothetical armed conflict during a predetermined time frame. It reflects currently approved assumptions, Red and Blue force structures, terrain, operational art, and tactics. A base case scenario portrays approved doctrinal and operational concepts in selected situations under simulated conditions.

Sequels to campaign plan. Actions after battle; an important means of anticipating a course of action and accelerating the decision cycle; based on possible outcomes of a future battle, they establish general dispositions, objectives, and missions for subordinate units after battle for amendment and dispatch.

Specific Task. An individual or collective task subordinate to a generic task.

Standard. A measure of the requirement to perform a function or task on the battlefield. Performance standards are expressed in a manner that permits them to be objectively measured. For example, performance standards can be expressed in terms of time (e.g., rounds per minute, time to transmit messages) and accuracy (e.g., percent hits, error rate).

Strategic Level of War. The level of war at which a nation or group of nations determines national or alliance security objectives and develops and uses national resources to accomplish those objectives. Activities at this level establish national and alliance military objectives; sequence initiatives; define limits and assess risks for the use of military and other instruments of power; develop global or theater war plans to achieve those objectives; and, provide armed forces and other capabilities in accordance with the strategic plan.

Strategic Level of War Operating Systems. The major functions occurring at the national and theater levels performed by civil and military organizations and unified, joint and combined strategic forces for successfully executing strategic plans/theater campaigns.

Tactical Level of War. The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives.

Tactical Level of War Operating Systems. See Battlefield Operating Systems.

Task. A clearly defined and measurable activity accomplished by individuals and organizations. Tasks are specific activities which contribute to the accomplishment of encompassing missions or other requirements.

Theater. The geographical area outside the Continental United States for which a commander of a unified or specified command has been assigned military responsibility.

Theater (Area) of War. That area of land, sea, and air which is, or may become, directly involved in the operations of war. Theater (Area) of Operations. That portion of an area of war necessary for military operations and for the administration of such operations.

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